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July 9, 2013

**VIA ELECTRONIC FILING**

Ms. Jocelyn Boyd  
Chief Clerk and Administrator  
Public Service Commission of South Carolina  
Synergy Business Park, Saluda Building  
101 Executive Center Drive  
Columbia, SC 29210

**Re: Application of Duke Energy Carolinas for Authority to Adjust and Increase  
Its Electric Rates and Charges and Request for Accounting Order  
Docket No. 2013-59-E**

Dear Ms. Boyd:

Enclosed for filing is the Stipulation Supporting and/or Rebuttal Testimony of the following witnesses on behalf of Duke Energy Carolinas, LLC:

1. Clark S. Gillespy;
2. Jeffrey R. Bailey;
3. Robert B. Hevert with 8 accompanying exhibits; and
4. Carol Shrum.

By copy of this letter, we are also serving all parties of record with the Stipulation Supporting and Rebuttal Testimony. Should you have any questions, please contact me.

Very truly yours,

Timika Shafeek-Horton  
Deputy General Counsel

Enclosures  
cc: Service List

**DOCKET NO. 2013-59-E**

**STIPULATION SUPPORTING AND  
REBUTTAL TESTIMONY OF  
CLARK S. GILLESPIE FOR  
DUKE ENERGY CAROLINAS, LLC**

**I.     INTRODUCTION AND PURPOSE**

**Q.     PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT POSITION.**

**A.**     My name is Clark Gillespy and my business address is 40 West Broad St., Greenville, South Carolina 29601. I am President of Duke Energy Carolinas, LLC (“Duke Energy Carolinas” or “Company”) for South Carolina. Duke Energy Carolinas is a subsidiary of Duke Energy Corporation (“Duke Energy”).

**Q.     DID YOU FILE DIRECT TESTIMONY IN THIS DOCKET?**

**A.**     Yes.

**Q.     WHAT IS THE PURPOSE OF YOUR STIPULATION SUPPORTING AND REBUTTAL TESTIMONY IN THIS CASE?**

**A.**     I support the Stipulation made by and among the Company, the South Carolina Office of Regulatory Staff (“ORS”); the South Carolina Small Business Chamber of Commerce (“SB Chamber”); the Commission of Public Works of the City of Spartanburg South Carolina and Spartanburg Sanitary Sewer District (“Spartanburg Water”); Wal-Mart Stores, East, LP and Sam’s East, Inc. (“Walmart”)(collectively, the “Parties”) filed with the Commission on July 1, 2013 in this docket stipulating and agreeing to a 10.2% return on common equity (“ROE”) subject to the execution of a written Settlement Agreement resolving all issues (the “ROE Stipulation”). The Company was able to reach the ROE Stipulation with the Parties subsequent to the Company’s filing of its pre-filed direct testimony and exhibits and after extensive discovery conducted by the ORS and other intervenors, as well as extensive negotiation on the amount of the Company’s ROE.

1 I also introduce several other witnesses who support the reasonableness of the  
2 ROE Stipulation and/or offer rebuttal to intervenor testimony filed in this case, and  
3 provide rebuttal to the testimony of several rebuttal witnesses, namely Steve Chriss of  
4 Walmart, Frank Knapp of SB Chamber and Kevin O'Donnell of the South Carolina  
5 Energy Users Committee ("SCEUC").

6 **Q. ARE OTHER COMPANY WITNESSES PROVIDING TESTIMONY, EITHER IN**  
7 **REBUTTAL OR IN SUPPORT OF THE ROE STIPULATION?**

8 **A.** Yes. Company Witness Hevert provides testimony in support of the ROE Stipulation, and  
9 witnesses Hevert, Shrum and Bailey all provide rebuttal testimony.

10 **II. THE ROE STIPULATION**

11 **Q. PLEASE PROVIDE AN OVERVIEW OF THE ROE STIPULATION.**

12 **A.** The ROE Stipulation reflects the agreement of the participating Parties as to the  
13 appropriate ROE for purposes of setting rates in this proceeding. The Parties have  
14 stipulated and agreed to a 10.2 percent ROE, subject to the execution of a written  
15 Settlement Agreement resolving all issues. The ROE Stipulation also explicitly provides  
16 that any party may withdraw from the ROE Stipulation without penalty or obligation if a  
17 Settlement Agreement is not reached.

18 **Q. WHY IS THE ROE STIPULATION BENEFICIAL FOR THE COMPANY'S**  
19 **CUSTOMERS?**

20 **A.** The Company's willingness to settle for rates designed on the basis of a 10.2 percent ROE  
21 and 7.89 percent overall rate of return will mitigate the impact of any ultimate rate increase  
22 on customers. These are lower than our currently allowed returns as well as the returns  
23 originally recommended by Company witness Hevert, a cost of capital expert, and represent

1 a risk to the Company which the Company is willing to bear in the context of a potential  
2 comprehensive settlement in this case.

3 **Q. IF THE PARTIES DO NOT REACH A COMPREHENSIVE SETTLEMENT**  
4 **AGREEMENT ON ALL ISSUES, WILL THE ROE STIPULATION REMAIN IN**  
5 **PLACE?**

6 **A.** No, it will not. In that instance, the Company would revert to its original request. The  
7 Company remains in negotiations with the Parties and is hopeful that it can reach a  
8 settlement with respect to the outstanding issues.

9 **III. REBUTTAL**

10 **Q. SC SMALL BUSINESS CHAMBER OF COMMERCE WITNESS KNAPP**  
11 **ASSERTS THAT DUKE ENERGY CAROLINAS' DEMAND SIDE**  
12 **MANAGEMENT ("DSM") PROGRAMS DO NOT PROVIDE CUSTOMERS WITH**  
13 **EFFECTIVE TOOLS TO REDUCE ENERGY USAGE? HOW DO YOU**  
14 **RESPOND?**

15 **A.** I respectfully disagree with Mr. Knapp. Witness Knapp's testimony asserts that my direct  
16 testimony did not provide the "required data" to evaluate the DSM programs, so he  
17 incorrectly presumes that the Company's DSM Programs are ineffective. Witness Knapp  
18 provides no other basis for his claim and does not present any evidence demonstrating the  
19 Company's DSM programs to be ineffective. While the Company is not clear what specific  
20 data witness Knapp believes is required to evaluate programs, I believe that the following  
21 facts demonstrate the comprehensiveness and effectiveness of our portfolio of DSM  
22 programs:

- 23
  - Duke Energy Carolinas offers its non-residential customers incentives on over 250

1 individual energy efficiency measures through its Non-Residential Smart Saver  
2 Prescriptive Program;

- 3 • Duke Energy Carolinas offers its non-residential customers a large amount of flexibility  
4 with its Non-Residential Smart Saver Custom Program that allows customers to receive  
5 incentives for efficiency measures not included in the Non-Residential Smart Saver  
6 Prescriptive Program;
- 7 • Duke Energy Carolinas offers its Non- Residential Assessment Program to assist its  
8 eligible non-residential customers in assessing their energy usage and to provide  
9 recommendations for more efficient use of energy. The program will also help identify  
10 those customers who could benefit from participation in Duke Energy Carolinas' DSM  
11 programs;
- 12 • Duke Energy Carolinas' DSM programs targeted at non-residential customers helped its  
13 non-residential customers save over 200,000 MWH in 2012 and over 465,000 MWH of  
14 cumulative savings since June of 2009;
- 15 • Duke Energy Carolinas' demand side management programs targeted at non-residential  
16 customers helped its non-residential customers save over 100 MW in 2012 and have  
17 generated over 467 MW of cumulative savings since June of 2009; and
- 18 • Duke Energy Carolinas has also helped its residential customers save nearly 1.1 GWH  
19 since June of 2009 through its residential demand side management programs.

20 Mr. Knapp's testimony reflects a misunderstanding of the Company's portfolio of  
21 DSM programs.

1   **Q.   DO YOU AGREE WITH MR. KNAPP'S CLAIM THAT DUKE ENERGY**  
2       **CAROLINAS SHOULD BE OFFERING ITS CUSTOMERS ON-BILL**  
3       **FINANCING?**

4   **A.**   No, I do not agree. Although the Company agrees that on-bill financing offers a potential  
5       channel to facilitate its customers becoming more efficient, we believe the Company's  
6       current portfolio of energy efficiency programs already provide a more effective mechanism  
7       to help its customers. Witness Knapp correctly points out that the South Carolina electric  
8       cooperatives and energy companies in Massachusetts and Connecticut have elected to offer  
9       customers on-bill financing for energy efficiency improvements, but he provides no  
10      evidence that these programs have been effective in facilitating customer investment in  
11      energy efficiency. Although the Company is not familiar with the specific programs  
12      referenced in witness Knapp's testimony, based on its own investigation into on-bill  
13      financing programs, Duke Energy Carolinas has found that most on-bill financing programs  
14      have struggled to attract participants, with most programs attracting well below 1%  
15      participation. Additionally, in its evaluation of such programs, Duke Energy Carolinas  
16      discovered that in many cases the efficiency savings realized from the financed investment  
17      has not offset the increase in customers' bills associated with the financing charge they pay  
18      on a monthly basis, which leads to customer dissatisfaction. In addition to these concerns  
19      raised by the experience of others, Duke Energy Carolinas is unsure of the capability of its  
20      billing system to support the requirements of on-bill financing and if it cannot, what the  
21      potential cost of upgrading its system could be.

1 Q. WITNESS KNAPP FURTHER ALLEGES THAT DUKE ENERGY CAROLINAS,  
2 BY COMMENTING ON SENATE BILL 536, IS DIRECTLY RESPONSIBLE FOR  
3 CUSTOMERS NOT BEING ABLE TO FINANCE THEIR INVESTMENT IN  
4 SOLAR THROUGH DIRECT PURCHASES OF ELECTRICITY FROM THIRD  
5 PARTIES. DO YOU AGREE WITH HIS CHARACTERIZATION OF THE  
6 SOUTH CAROLINA GENERAL ASSEMBLY'S REVIEW AND  
7 CONSIDERATION OF THIS LEGISLATION?

8 A. No, I do not agree. This topic is not relevant to the matters before the Commission in this  
9 proceeding. This is a matter for the South Carolina General Assembly and its members.

10 Moreover, I disagree with his characterization. The members of the South  
11 Carolina General Assembly, not the Company or any other party, decide the respective  
12 fate of any and every piece of proposed legislation that comes before them. Witness  
13 Knapp is correct that Bob Long from SCANA Corporation did offer comments on behalf  
14 of South Carolina Electric & Gas and the Company, among other parties, regarding the  
15 subject legislation, Senate Bill 536. The purpose of those comments was merely to  
16 convey that the Public Utilities Review Committee ("PURC") of the General Assembly  
17 established the Energy Advisory Council (EAC) in 2010 to develop recommendations for  
18 a comprehensive state energy plan with a focus on clean energy and job creation. The  
19 EAC is comprised of members from a broad spectrum of stakeholders such as the utility,  
20 environmental, and regulatory communities. Dukes Scott, Executive Director of the  
21 ORS, and Ashlie Lancaster of the State Energy Office co-facilitate the EAC. On January  
22 14, 2013, the EAC agreed to study the complex issue of third party solar sales. Any  
23 recommendations the EAC makes to the PURC will then be considered by the PURC for



1 drafting future legislation. Mr. Long's comments requested that the General Assembly  
2 simply allow the EAC to complete its work before considering Senate Bill 536. Duke  
3 Energy Carolinas recognizes and understands that solar will play a role in our future in  
4 South Carolina – both for our customers and the grid that serves them. We also  
5 understand the need to put a framework in place that appropriately captures the value of  
6 not only solar but also the grid itself – we need to get the rules right. The EAC is  
7 scheduled to complete its work in October 2013.

8 **Q. SCEUC WITNESS O'DONNELL RECOMMENDS THAT THE COMMISSION**  
9 **DISALLOW RECOVERY OF \$2.6 MILLION RELATED TO THE COST OF**  
10 **THE DEFINED BENEFIT PLAN. IS THIS RECOMMENDATION**  
11 **APPROPRIATE?**

12 A. No. The total package of retirement benefits provided by Duke Energy Carolinas to its  
13 employees is designed to be aligned and competitive with similar utilities so that the  
14 Company can attract and retain employees. The retirement benefits provided to Duke  
15 Energy Carolinas employees are no greater in value when compared to the median of  
16 benefits provided by similarly situated utilities. If a defined benefit program was not  
17 provided to employees, a replacement benefit would need to be provided in order to  
18 maintain a competitive benefit – therefore there would still be a cost of providing an  
19 alternative benefit if the defined benefit plan benefit was replaced.

20 The Company also disagrees with witness O'Donnell's statement that, as of  
21 August 2010, only 17% of the Fortune 100 firms offered a defined benefit plan.  
22 According to a survey prepared by Towers Watson as of June 2010, while 17% offered a  
23 final average pay defined benefit plan to new hires, when you consider all types of

1 defined benefit plan designs, including cash balance designs like the one in place at Duke  
2 Energy Carolinas, 42% of Fortune 100 firms offered a defined benefit plan to new  
3 employees. This information does not reflect the number of companies that continue to  
4 provide a defined benefit plan to existing employees.

5 **Q. WITNESS O'DONNELL FURTHER STATES THAT DUKE ENERGY**  
6 **CAROLINAS' CUSTOMERS SHOULD NOT BEAR THE RISK OF POTENTIAL**  
7 **UNDERPERFORMANCE OF THE COMPANY'S INVESTMENTS IN ITS**  
8 **PENSION PLAN, AND THAT ANY SUCH RISK SHOULD BE BORNE BY DUKE**  
9 **ENERGY'S SHAREHOLDERS. DO YOU AGREE?**

10 A. No. Pension plans are but one aspect of compensation for employees. Duke Energy  
11 Carolinas designs its total compensation plan to be competitive in the industry in order to  
12 attract and retain qualified employees. Customers benefit directly from the efforts of our  
13 employees and the costs incurred to hire and retain those employees. As with other costs  
14 incurred by the Company, to the extent customers benefit from those incurred costs, the  
15 costs are properly attributable to the customers. The Company is of course mindful of the  
16 effect of increasing costs on customers. Therefore, the Company continues to monitor  
17 and evaluate the pension program and its costs.

18 **Q. ARE THE COMPANY'S ASSUMPTIONS REGARDING ITS EXPECTED**  
19 **RETURN FOR ITS DEFINED BENEFIT PLANS REASONABLE?**

20 A. Yes. The Company uses three external firms to validate the long term return on assets  
21 assumption based on the investment mix in the Master Trust. Duke Energy Carolinas'  
22 external auditor audits our pension return assumptions to ensure such assumptions are  
23 reasonable.

1 Q. WITNESS O'DONNELL ALSO RECOMMENDS THAT THE COMMISSION  
2 DISALLOW RECOVERY OF INCENTIVE PAY TO DUKE ENERGY  
3 CAROLINAS EXECUTIVES. IS THIS RECOMMENDED ADJUSTMENT  
4 APPROPRIATE?

5 A. No. These incentive costs are ongoing costs associated with maintaining leadership  
6 positions and responsibilities that are required to run the Company in a manner that  
7 ensures safe, reliable service is provided to customers. Incentives are a necessary  
8 component of any competitive compensation and benefit package. Duke Energy  
9 Carolinas' compensation philosophy is to target total compensation of base pay and  
10 incentives to be at the median of the market when compared to peer companies. This  
11 philosophy supports the Company's goal to attract, retain, and motivate highly skilled  
12 employees who can provide our customers the level of service they expect.

13 IV. CONCLUSION

14 Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?

15 A. Yes.

**BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2013-59-E**

In the Matter of:

Application of Duke Energy Carolinas,  
LLC for Authority to Adjust and Increase  
Its Electric Rates and Charges

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**REBUTTAL TESTIMONY OF  
JEFFREY R. BAILEY FOR  
DUKE ENERGY CAROLINAS, LLC**

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1                                    **I.     INTRODUCTION AND PURPOSE**

2    **Q.     PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND CURRENT**  
3           **POSITION.**

4    **A.**    My name is Jeffrey R. Bailey, and my business address is 1000 E. Main Street,  
5           Plainfield, Indiana 46168. I am Director, Pricing and Analysis for Duke Energy  
6           Carolinas, LLC (“Duke Energy Carolinas” or the “Company”) and its affiliated  
7           utility operating companies.

8    **Q.     WHAT ARE YOUR RESPONSIBILITIES AS DIRECTOR, PRICING AND**  
9           **ANALYSIS?**

10   **A.**    My primary responsibility is to provide rate analysis and to develop the rates and  
11           charges contained in tariffs and contracts for gas or electric service for Duke  
12           Energy Corporation’s (“Duke Energy”) utility operating companies, including  
13           Duke Energy Carolinas.

14   **Q.     DID YOU PROVIDE DIRECT TESTIMONY IN THIS PROCEEDING?**

15   **A.**    Yes. My education and experience are summarized in my direct testimony.

16   **Q.     WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**  
17           **PROCEEDING?**

18   **A.**    I provide comments on the testimony filed on behalf of the Commission of Public  
19           Works of the City of Spartanburg South Carolina and Spartanburg Sanitary Sewer  
20           District (“Spartanburg Water”) by witnesses G. Newton Pressley and Kenneth  
21           Tuck, and the testimony of Witness Kevin O’Donnell, filed on behalf of the South  
22           Carolina Energy Users Committee (“SCEUC”).

1   **Q.    WITNESS PRESSLEY STATED THE COMPANY HAS NO SUPPORT OR**  
2       **JUSTIFICATION FOR ITS INCREASE OF RATE MP. HOW DO YOU**  
3       **RESPOND TO THIS?**

4   A.   The Company's Rate Schedule MP is a derivative of Rate Schedule OPT,  
5       meaning it is included within OPT in its cost of service study. Therefore, Rate  
6       Schedule MP is subject to the same revenue requirement increase supported by  
7       the cost of service study as Rate Schedule OPT, and there is no cost-based reason  
8       to exempt it. The Company, through its Application, testimony and exhibits, has  
9       provided support for an increase to its overall revenue requirement in its filed  
10      case.

11   **Q.    WITNESS TUCK HAS FURTHER STATED THE COMPANY HAS**  
12      **RAISED RATES FOR RATE MP FOR THE PURPOSE OF FORCING**  
13      **CUSTOMERS TO LEAVE THE SCHEDULE. DO YOU AGREE?**

14   A.   No, I do not. The rates for Rate Schedule MP have been raised in the recent  
15      general rate cases according to the terms of the Commission's rate orders, along  
16      with the rates for other schedules. In the current rate case, Rate Schedule MP has  
17      been given the same percent increase in proposed revenue as that of the entire  
18      OPT class in which Schedule MP is included. The Company believes this  
19      allocation to be reasonable based on the results of the cost of service study  
20      supporting its Application in this case. At no time has the Company targeted Rate  
21      Schedule MP to receive extra fees or costs above its share of the overall OPT  
22      revenue requirements.

1    **Q.    WITNESS O'DONNELL POINTS OUT THAT THE MOST OF THE**  
2           **INCREASE TO RATE SCHEDULE OPT HAS BEEN INCLUDED IN THE**  
3           **ON-PEAK CHARGES.  HE ARGUES THAT THE COMPANY HAS**  
4           **PERHAPS GONE TOO FAR IN THIS APPROACH TO MINIMIZE ITS**  
5           **RISK AND THE DESIGN WILL CREATE A HARDSHIP TO**  
6           **CUSTOMERS THAT CANNOT SHIFT LOAD TO THE OFF-PEAK**  
7           **PERIOD.  HOW DO YOU RESPOND?**

8    **A.    The Company has attempted to preserve the original design of Rate Schedule**  
9           **OPT.  In past practice, Duke Energy Carolinas has recovered the additional**  
10          **assigned revenue by way of what I refer to as a "fixed cost recovery method."**  
11          **With this method, the recovery of additional fixed costs is allocated to the**  
12          **respective charges within the rate based on their respective contribution to the**  
13          **recovery of fixed costs.  This maintains the integrity of the structure going**  
14          **forward.  It is not an attempt to reduce any risk, real or perceived, for the**  
15          **Company.**

16                Mr. O'Donnell asserts that the current design creates a hardship for  
17          customers unable to shift load and harms single shift operations.  However, the  
18          design of Rate Schedule OPT is such that approximately 78% of available hours  
19          are off-peak.  Because Rate Schedule OPT is a high load factor rate, customers  
20          then enjoy relatively inexpensive energy in the off-peak hours.  This serves to  
21          counterbalance the effects Mr. O'Donnell expresses concern over.  Additionally,  
22          lower load factor customers, i.e. single shift operations, are likely to be more

1 economically served under Rate Schedule I, our rate for lower load factor  
2 industrial customers.

3 In short, the design proposed by the Company for Rate Schedule OPT is  
4 consistent with the original structure of the rate and past practice for revenue  
5 assignment in previous cases. I recommend that the Company's design approach  
6 for this rate be approved.

7 **II. CONCLUSION**

8 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

9 **A. Yes.**



**BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2013-59-E**

In The Matter of:	)	<b>ROE STIPULATION SUPPORT</b>
	)	<b>AND REBUTTAL TESTIMONY OF</b>
Application of Duke Energy Carolinas, LLC	)	<b>ROBERT B. HEVERT</b>
For Adjustment of Rates and Charges Applicable	)	<b>FOR</b>
To Electric Service in South Carolina	)	<b>DUKE ENERGY CAROLINAS, LLC</b>
	)	

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## **I. INTRODUCTION**

1 **Q. PLEASE STATE YOUR NAME, AFFILIATION AND BUSINESS**  
2 **ADDRESS.**

3 **A.** My name is Robert B. Hevert. I am Managing Partner of Sussex Economic  
4 Advisors, LLC ("Sussex"). My business address is 161 Worcester Road, Suite  
5 503, Framingham, Massachusetts 01701.

6 **Q. ARE YOU THE SAME ROBERT B. HEVERT WHO SUBMITTED**  
7 **DIRECT TESTIMONY IN THIS PROCEEDING?**

8 **A.** Yes, I filed direct testimony ("Direct Testimony") on behalf of Duke Energy  
9 Carolinas, LLC ("Duke Energy Carolinas" or the "Company") along with the  
10 Company's Application on March 18, 2013.

11 **Q. WHAT IS THE PURPOSE OF YOUR ROE STIPULATION SUPPORT**  
12 **AND REBUTTAL TESTIMONY?**

13 **A.** The purpose of my testimony is to explain my support for the Stipulation, dated  
14 July 1, 2013, between the Company and (1) the South Carolina Small Business  
15 Chamber of Commerce; (2) the Commission of Public Works of the City of  
16 Spartanburg South Carolina and Spartanburg Sanitary Sewer District; (3) the  
17 South Carolina Office of Regulatory Staff; and (4) Wal-Mart Stores, East LP and  
18 Sam's East, Inc. (the "ROE Stipulation"). In particular, my testimony addresses  
19 the agreed-upon Return on Equity ("ROE" or "Cost of Equity") of 10.20 percent  
20 contained in that agreement (that return is referred to herein as the "stipulated  
21 ROE"). My ROE Stipulation Support and Rebuttal Testimony also addresses  
22 certain portions of the direct testimony filed by Mr. Kevin W. O'Donnell on

1           behalf of the South Carolina Users Energy Committee (“SCEUC”), an intervening  
2           party that is not a signatory to the ROE Stipulation.

3   **Q.   HOW IS THE REMAINDER OF YOUR TESTIMONY STRUCTURED?**

4   **A.**   Section II provides my assessment and explains the bases of my support for the  
5           ROE Stipulation. In Sections III and IV, I provide a summary of my rebuttal  
6           testimony, and my response to Mr. O’Donnell, respectively; Section V concludes  
7           my testimony.

8   **Q.   HAVE YOU PREPARED ANY EXHIBITS IN CONJUNCTION WITH**  
9           **YOUR REBUTTAL TESTIMONY?**

10   **A.**   Yes. Rebuttal Exhibit No. RBH-1 through Rebuttal Exhibit No. RBH-8 have been  
11           prepared by me or under my direct supervision.

12                                   **II.    ROE STIPULATION**

13   **Q.   ARE YOU FAMILIAR WITH THE TERMS OF THE ROE STIPULATION**  
14           **BETWEEN THE COMPANY AND CERTAIN INTERVENING PARTIES?**

15   **A.**   Yes, I understand that the parties listed above have agreed to an ROE of 10.20  
16           percent. I also recognize that the 10.20 percent ROE is 30 basis points below the  
17           10.50 percent return authorized for the Company in Docket No. 2011-271-E  
18           (February 2012).<sup>1</sup> The ROE Stipulation also is somewhat below the 10.25 percent  
19           ROE approved by the Commission on December 20, 2012 for South Carolina  
20           Electric and Gas (“SCE&G”).<sup>2</sup>

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<sup>1</sup>     See Docket No. 2011-271-E, *Order Approving Increase in Rates and Charges and Settlement Agreement*, February 3, 2012, at 21.

<sup>2</sup>     See Docket No. 2012-218-E, *Order Approving Adjustments in Rates and Charges and a Mid-Period Reduction in Base Rates for Fuel*, December 20, 2012, at 19.

1   **Q.    IN GENERAL, DO YOU SUPPORT THE COMPANY’S DECISION TO**  
2       **AGREE TO THE ROE STIPULATION?**

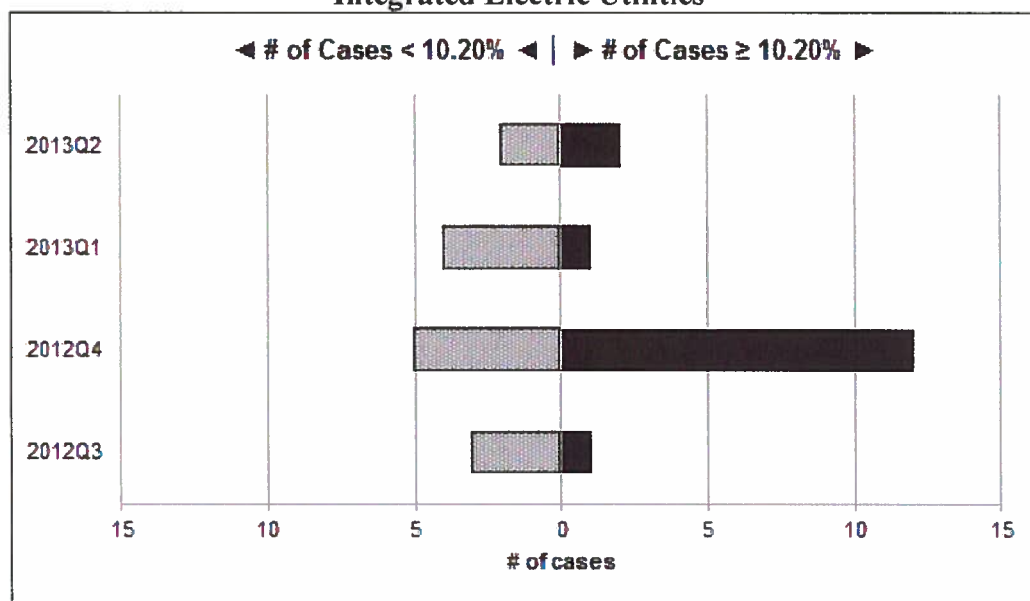
3   **A.**    Yes, I do.  Although the 10.20 percent ROE is somewhat below the lower bound  
4           of my recommended range, I recognize that a balanced settlement regarding the  
5           ROE enables the parties to continue negotiating other contested issues in this  
6           case.  It is the Company’s determination that the terms of the ROE Stipulation are  
7           such that it will be able to raise the external capital required to continue to provide  
8           safe and reliable service, and that it will be able to do so when needed and on  
9           reasonable terms.  I have no reason to disagree with that determination.

10               While the 10.20 percent ROE included in the ROE Stipulation falls within  
11           the range of analytical results presented in my Direct Testimony, current capital  
12           market conditions are such that the models used to estimate the Cost of Equity  
13           continue to produce a wide range of sometimes conflicting estimates.  Such  
14           conditions often indicate a degree of instability and uncertainty that suggest  
15           somewhat higher, rather than lower capital costs.  In that regard, it remains my  
16           position that in a fully litigated proceeding, a range of 10.50 percent to 11.50  
17           percent would represent a reasonable and appropriate measure of the Company’s  
18           Cost of Equity.  Nonetheless, I recognize the benefits associated with the decision  
19           to enter into the ROE Stipulation and as such, it is my view that the 10.20 percent  
20           stipulated ROE is a reasonable resolution of an otherwise contentious issue,  
21           provided a more comprehensive settlement can be reached.

22               I also recognize that over the past four calendar quarters, authorized  
23           returns of 10.20 percent and higher have been common for vertically integrated

electric utilities (such as Duke Energy Carolinas). In fact, over one-half of the returns authorized during that period were 10.20 percent or above (see Chart 1, below). Additionally, as discussed in more detail below, the median authorized ROE for vertically integrated utilities operating in jurisdictions considered “more credit supportive” has been 10.30 percent, somewhat above the 10.20 percent ROE contained in the ROE Stipulation.

**Chart 1: Recently Authorized Equity Returns for Vertically Integrated Electric Utilities<sup>3</sup>**



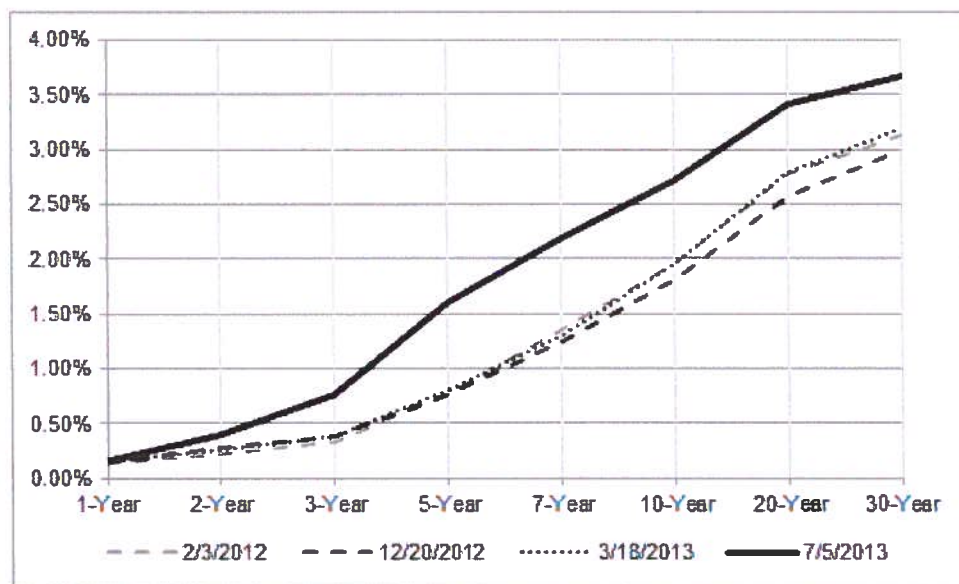
**Q. WHAT WOULD BE THE BASIS OF A RECOMMENDATION IN EXCESS OF THE STIPULATED ROE INCLUDED IN THE ROE STIPULATION IN THE CONTEXT OF A FULLY LITIGATED PROCEEDING?**

**A.** There is little question that market conditions have become more volatile, and fundamental measures of investor return requirements, in particular long-term Treasury yields, have substantially increased since I filed my Direct Testimony on March 18, 2013. As Chart 2 (below) demonstrates, Treasury yields have

<sup>3</sup> Source: Exhibit SWC-3.

increased significantly since the Commission's decisions in Dockets 2011-271-E (Duke Energy Carolinas; February 3, 2012) and 2012-218-E (SCE&G; December 20, 2012), with long-term interest rates experiencing the most substantial increase. Because there historically has been a strong relationship between long-term Treasury yields and utility dividend yields,<sup>4</sup> it follows that measures of the Cost of Equity would increase along with the upward-shifting yield curve.<sup>5</sup>

**Chart 2: U.S. Treasury Yield Curve: 2/3/2012 – 7/5/2013<sup>6</sup>**



<sup>4</sup> See Direct Testimony of Robert B. Hevert, at 59.

<sup>5</sup> The current yield curve reflects the current expected return on Treasury securities held to maturity. A 30-year yield of 3.50 percent, for example, means that if bought today and held for 30 years, the return would be 3.50 percent. The yield curve, and in particular the slope of the yield curve, also can be used to calculate the return investors expect to receive on Treasury securities bought in the future. For example, the current 30-year Treasury yield should produce the same yield as purchasing a two-year Treasury note today, and a Treasury note with 28 years left to maturity two years from now. That is, the current 30-year Treasury yield should be equivalent to the combination of (1) the current two-year Treasury yield, and (2) the 28-year Treasury yield two years from now. In this case, the expected 28-year Treasury yield is considered to be a "forward" rate, and can be calculated based on the current yield curve. Just as current Treasury yields have increased, so have the forward yields. For example, on March 18, 2013 the forward 28-year Treasury yield was 3.39 percent. By May 30, 2013 it had increased to 3.50 percent, and on July 5, 2013, it increased an additional 42 basis points to 3.92 percent. Thus, both current and forward long-term Treasury yields have increased over the past few months, with that increase accelerating since May 30, 2013.

<sup>6</sup> Source: Federal Reserve Board Schedule H.15. On February 3, 2012 Duke Energy Carolinas was authorized an ROE of 10.50 percent; on December 20, 2012 SCE&G was authorized an ROE of 10.25 percent; my Direct Testimony was filed on March 18, 2013.

Considering the recent increase in current and expected Treasury yields, and the average ROE of 10.30 percent for vertically integrated utilities in “more credit supportive” jurisdictions<sup>7</sup> since the beginning of 2012, Mr. O’Donnell’s ROE range of 7.90 percent to 9.50 percent and recommendation of 9.00 percent (120 basis points below the stipulated ROE) is particularly unreasonable.

**Table 1: Summary of ROE Recommendations**

<i>Witness</i>	<i>ROE RANGE</i>		<i>Accepted / Recommended ROE<sup>8</sup></i>
	<i>Low</i>	<i>High</i>	
Stipulated ROE			10.20%
Mr. O’Donnell	7.90%	9.50% <sup>9</sup>	9.00%
Mr. Hevert	10.50%	11.50%	10.20%
Mr. Chriss	9.00%	10.50%	10.20%

**Q. HAVE YOU REVIEWED MR. O’DONNELL’S RECOMMENDATION RELATIVE TO THE ROE STIPULATION?**

**A.** Yes, I have. While the stipulated 10.20 percent ROE is within the range of returns identified by several witnesses in this proceeding, it is nearly 120 basis points above Mr. O’Donnell’s 9.00 percent recommendation. Even the *top* end of Mr. O’Donnell’s analytical ROE range (*i.e.*, 9.50 percent), is 70 basis points *below* the stipulated ROE. At issue, then, is whether there is any reasonable basis to conclude that the return required by equity investors in Duke Energy Carolinas is so far below the stipulated ROE. Mr. O’Donnell points to decreases in long-

<sup>7</sup> As rated by Standard & Poor’s.

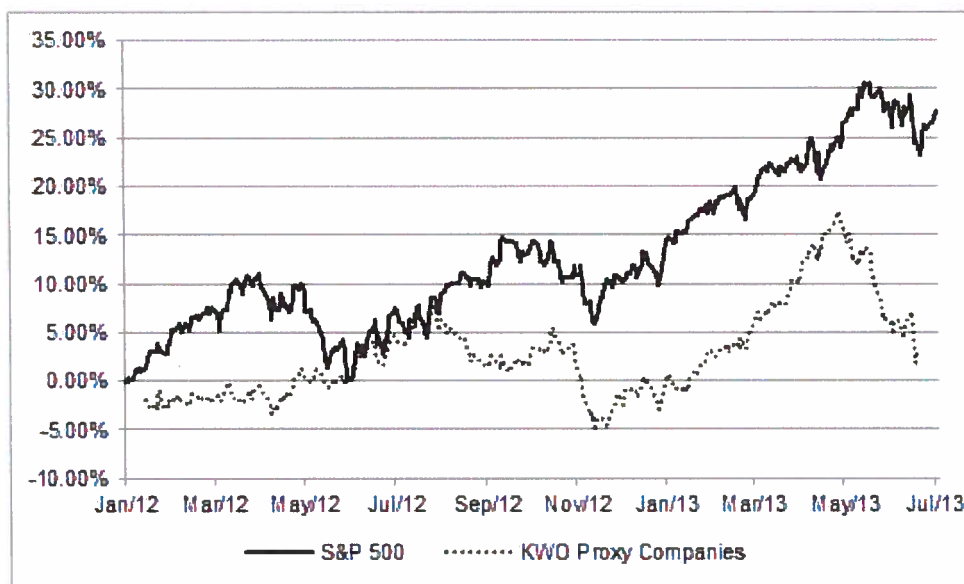
<sup>8</sup> SCEUC has not signed on to the ROE Stipulation.

<sup>9</sup> See Direct Testimony of Kevin W. O’Donnell, at 25. The lower bound of Mr. O’Donnell’s analytical range is determined by the range of ROE results he produces when performing a DCF analysis on Duke Energy. The upper bound is set by his Comparable Earnings analysis.



1 term interest rates and increases in utility company stock prices, and then  
2 concludes, by extension, that the Cost of Equity is commensurately low.<sup>10</sup>  
3 However, neither of those benchmarks indicate investors' required return has  
4 significantly decreased since the Company was authorized its current 10.50  
5 percent ROE in February 2012. As Chart 3 (below) demonstrates, the utility  
6 companies in Mr. O'Donnell's proxy companies have significantly under-  
7 performed the market from January 1, 2012 through July 5, 2013; in fact, their  
8 stock prices are at nearly the same level they were at one and a half years ago.

9 **Chart 3: Electric Utilities, S&P 500 Price Performance: 1/1/2012 – 7/5/2013**<sup>11</sup>



10  
11 In addition (as shown in Chart 4 below), long-term Treasury yields are  
12 now above the level of yields experienced when Duke Energy Carolina was  
13 authorized an ROE of 10.50 percent.

10

*Ibid.*

11

Source: SNL Financial

Chart 4: 30-Year U.S. Treasury Bond Yields: 1/1/2012 – 7/5/2013<sup>12</sup>



**Q. ARE THERE ANY OTHER DATA POINTS THAT SUGGEST THE STIPULATED ROE OF 10.20 PERCENT IS REASONABLE?**

**A.** Yes, there are. Walmart witness Mr. Chriss provided data regarding authorized returns for 64 electric utilities from 2012 through June 21, 2013 (as reported by SNL Financial).<sup>13</sup> As shown in Rebuttal Exhibit No. RBH-1, half of the authorized ROEs for vertically integrated electric utilities in that group (that is, utilities such as Duke Energy Carolinas that own and operate generation assets, as well as distribution assets) were 10.20 percent or higher.<sup>14</sup>

<sup>12</sup> Source: Federal Reserve Board Schedule H.15

<sup>13</sup> See Exhibit SWC-3.

<sup>14</sup> *Ibid.* Exhibit SWC-3 identifies 16 companies that are distribution-only. That is, they operate in jurisdictions that have “unbundled” the electric generation function from transmission and distribution and as such, do not own or operate electric generating assets.

1 Q. ARE THERE OTHER DISTINCTIONS THAT ARE IMPORTANT TO  
2 CONSIDER WHEN REVIEWING MR. CHRISS' EXHIBIT SWC-3?

3 A. Yes, there are. As noted in my Direct Testimony, the Company's credit rating  
4 and outlook depend substantially on the extent to which rating agencies view the  
5 regulatory environment credit supportive, or not.<sup>15</sup> Moody's, for example, finds  
6 the regulatory environment to be so important that 50.00 percent of the factors  
7 used to determine the Company's credit ratings are determined by the nature of  
8 regulation and likelihood of cost recovery. Similarly, Standard & Poor's has  
9 noted that:

10 The assessment of regulatory risk is perhaps the most important  
11 factor in Standard & Poor's Ratings Services' analysis of a U.S.  
12 regulated, investor-owned utility's business risk. Each of the other  
13 four factors we examine--markets, operations, competitiveness,  
14 and management--can affect the quality of the regulation a utility  
15 experiences, but we believe the fundamental regulatory  
16 environment in the jurisdictions in which a utility operates often  
17 influences credit quality the most.<sup>16</sup>

18 Given the Company's ongoing need to access external capital, and in light  
19 of the weight that both Moody's and S&P place on the nature of the regulatory  
20 environment, I believe that it also is important to consider the extent to which the  
21 jurisdictions included in Exhibit SWC-3 are considered by rating agencies to be  
22 credit supportive.

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<sup>15</sup> See Direct Testimony of Robert B. Hevert, at 57.

<sup>16</sup> Standard & Poor's, *Utilities: Assessing U.S. Utility Regulatory Environments*, updated November 15, 2011.

1 **Q. AS A POINT OF REFERENCE, DO RATING AGENCIES CONSIDER**  
2 **SOUTH CAROLINA TO BE A CREDIT-SUPPORTIVE REGULATORY**  
3 **ENVIRONMENT?**

4 **A.** Yes. S&P ranks regulatory jurisdictions according to the degree of credit-  
5 supportiveness; South Carolina is ranked “More Credit Supportive,” which is the  
6 highest tier to which any jurisdiction in Exhibit SWC-3 is assigned.<sup>17</sup>

7 **Q. HOW DID YOU TAKE THOSE FACTORS INTO CONSIDERATION IN**  
8 **REVIEWING EXHIBIT SWC-3?**

9 **A.** I first replicated Exhibit SWC-3, and ensured that I was able to calculate the same  
10 mean and median results. I then applied S&P’s rankings (as represented by a  
11 numerical score) to the jurisdictions reported in Exhibit SWC-3 (*see* Rebuttal  
12 Exhibit No. RBH-1).

13 **Q. WHAT DID THAT ANALYSIS REVEAL?**

14 **A.** The principal observation is that the mean and median ROE for vertically  
15 integrated companies operating in jurisdictions comparable to South Carolina are  
16 both 10.30 percent. In jurisdictions that are either “More Credit Supportive” or  
17 “Credit Supportive”, the mean and median ROE is 10.18 percent and 10.25  
18 percent, respectively.

19

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<sup>17</sup> Standard & Poor’s, *Utilities: Standard & Poor’s Revises Its U.S. Utility Regulatory Assessments*, December 28, 2012, at 3.

### **III. SUMMARY OF REBUTTAL TESTIMONY**

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE ISSUES AND**  
2 **RECOMMENDATIONS ADDRESSED IN YOUR TESTIMONY.**

3 **A.** In my Direct Testimony, I recommended an ROE of 11.25 percent, based on a  
4 range of ROE estimates of 10.50 percent to 11.50 percent.<sup>18</sup> As my Direct  
5 Testimony discussed, my recommendation, and the analytical results on which it  
6 was based, considered a variety of factors including prevailing capital market  
7 conditions and the specific risks faced by Duke Energy Carolinas. Because the  
8 application of financial models and interpretation of their results is often the  
9 subject of differences among analysts in regulatory proceedings, I believe that it is  
10 important to review and consider a variety of data points; doing so enables us to  
11 put in context both quantitative analyses and the associated recommendations.

12 In this proceeding, there is a meaningful difference between the ROE  
13 range and recommendation offered by Mr. O'Donnell on the one hand, and the  
14 stipulated ROE on the other (*see* Table 1, above). As discussed throughout my  
15 response to Mr. O'Donnell, there are a number of methodological, theoretical and  
16 practical reasons why that is the case. While there are various points of  
17 disagreement between Mr. O'Donnell and I regarding methodological issues,  
18 there is a limited set of factors that account for the differences in our respective  
19 results and recommendations. Principal among those differences are the growth  
20 rates assumed in the Constant Growth Discounted Cash Flow ("DCF") analysis.

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<sup>18</sup> See Direct Testimony of Robert B. Hevert, at 2.

1           Mr. O'Donnell's Comparable Earnings analysis, which relies on Value  
2           Line's projected Return on Common Equity ("ROCE") as a measure of the  
3           market-based Cost of Equity, fails to consider the effect that recent and expected  
4           capital expenditures have on Value Line's projected ROCE over the coming three  
5           to five years.<sup>19</sup> In essence, the realized Return on Common Equity for many of  
6           Mr. O'Donnell's proxy companies is significantly diluted by recent or projected  
7           additions to net plant. That finding is important since the projected Return on  
8           Common Equity also is an input to the "Plowback Ratio" method used by Mr.  
9           O'Donnell to estimate the long-term growth component of his Constant Growth  
10          DCF model. The downward bias in the projected realized Return on Common  
11          Equity therefore results in a downward bias in the DCF estimates to which Mr.  
12          O'Donnell gives considerable weight in arriving at his ROE recommendation.

13           There remain a number of other areas in which I disagree with the  
14           approaches taken by Mr. O'Donnell, which I discuss in the remainder of my  
15           testimony. Given the divergence of our opinions and variability in our results, it  
16           also is important to consider the reasonableness of our conclusions in the context  
17           of observable, verifiable benchmarks. In that important respect, it is clear that an  
18           ROE recommendation of 9.00 percent is incompatible with capital market  
19           conditions, and is well below the prevailing level of returns authorized for  
20           vertically integrated utilities in this and other regulatory jurisdictions.

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<sup>19</sup> See Direct Testimony of Robert B. Hevert, at 34-35.

#### **IV. RESPONSE TO THE DIRECT TESTIMONY OF MR. O'DONNELL**

**Q. PLEASE PROVIDE A BRIEF SUMMARY OF MR. O'DONNELL'S DIRECT TESTIMONY AND RECOMMENDATION.**

**A.** Mr. O'Donnell recommends an ROE of 9.00 percent, based on his application of the DCF and "comparable earnings" approaches. In preparing his DCF analyses, Mr. O'Donnell reviewed data for a proxy group of 33 companies, as well as Duke Energy Corporation ("DEC"), the parent of Duke Energy Carolinas. Mr. O'Donnell reviewed a variety of historical and prospective growth rates for each of his proxy companies, although his eventual DCF results for the proxy group, which range from 8.40 percent to 9.00 percent, are based on his conclusion that an appropriate range of growth rates is from 4.50 percent to 5.00 percent.<sup>20</sup> Performing a second DCF analysis, Mr. O'Donnell concluded that DEC's DCF result is in the range of 7.90 percent to 8.60 percent, based on his assumption that a "proper" growth rate for DEC is from 3.50 percent to 4.00 percent.<sup>21</sup>

**Q. AS A GENERAL MATTER, DO YOU BELIEVE MR. O'DONNELL'S RECOMMENDATION OF A 9.00 PERCENT ROE IS FAIR AND REASONABLE FOR THE COMPANY, AND IS ADEQUATE TO SUPPORT CREDIT QUALITY AND ACCESS TO CAPITAL?**

**A.** No, I do not. An important consequence of the authorized return is the ability to generate the cash flow (sometimes referred to as "Funds Flow from Operations," or "FFO") needed to fund required debt service and capital investments, as well as dividends. While Mr. O'Donnell is correct that there generally are three forms of

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<sup>20</sup> See Direct Testimony of Kevin W. O'Donnell, at 22.

<sup>21</sup> *Ibid.*

1 external capital (*i.e.*, common equity, preferred stock, and long-term debt),<sup>22</sup> he  
2 fails to consider the importance of internally generated funds as a source of  
3 financing capital expenditures, as the primary financial measure of credit quality,  
4 and as the source of dividend payments. From the perspective of fixed income  
5 investors, FFO is one of the most important metrics used to assess credit quality;  
6 companies with higher levels of funds flow as a ratio of interest or debt tend to  
7 have higher credit ratings (and, therefore, lower costs of capital).<sup>23</sup> Similarly,  
8 equity investors are keenly focused on the ability to fund capital investments and  
9 dividends through cash from operations. Given that the authorized ROE and  
10 capital structure are key determinants of funds flow, and knowing that the  
11 financial community is concerned with risks associated with the regulatory  
12 environment, Mr. O'Donnell's recommended ROE and capital structure present  
13 significant risks and concerns for both debt and equity investors.

14 **Q. WHAT ARE THE KEY AREAS OF DISAGREEMENT BETWEEN YOU**  
15 **AND MR. O'DONNELL?**

16 **A.** The principal areas of disagreement include: (1) proxy group selection criteria and  
17 comparison companies; (2) the growth rate estimates used in the DCF models; (3)  
18 the use of the Comparable Earnings Method; (4) the use of the CAPM method; (5)  
19 the relative risk between debt and equity; and (6) the relevance of recently  
20 authorized returns.

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<sup>22</sup> See Direct Testimony of Kevin W. O'Donnell, at 29.

<sup>23</sup> See, for example, Moody's Investors Service, *Rating Methodology: Regulated Electric and Gas Utilities*, August 2009.



*Proxy Group Selection Criteria and Comparison Companies*

1 **Q. PLEASE SUMMARIZE THE SCREENING CRITERIA BY WHICH MR.**  
2 **O'DONNELL DEVELOPED HIS PROXY GROUP.**

3 **A.** Mr. O'Donnell began with the companies listed in Value Line's Electric  
4 Utility Industry group and arrived at his proxy group by including only companies  
5 that met the following three screening criteria:

- 6 1. S&P Quality Ranking of B-, B, or B+;
- 7 2. Pays dividends, or has not recently reinstated dividends; and
- 8 3. Has not recently been subject to merger activity.<sup>24</sup>

9 Based on those criteria, Mr. O'Donnell arrived at the group of 33 companies  
10 contained in his Exhibits KWO-1, 2, and 3.<sup>25</sup>

11 **Q. ARE THE SCOPE AND DEFINITION OF THE SCREENS APPLIED BY**  
12 **MR. O'DONNELL GENERALLY CONSISTENT WITH THOSE APPLIED**  
13 **IN YOUR DIRECT TESTIMONY?**

14 **A.** While certain of the screening criteria are common to our analyses, there are  
15 significant differences between our approaches. In my view, Mr. O'Donnell's  
16 screening criteria are far too general and result in a proxy group that, taken as a  
17 whole, is not sufficiently comparable to Duke Energy Carolinas to arrive at a  
18 reasoned ROE recommendation.

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<sup>24</sup> See Direct Testimony of Kevin W. O'Donnell, at 16-17.

<sup>25</sup> See Direct Testimony of Kevin W. O'Donnell, Exhibits KWO-1, 2, and 3.

1 **Q. DO INVESTORS NECESSARILY VIEW ELECTRIC UTILITIES AS A**  
2 **LARGELY HOMOGENEOUS GROUP?**

3 **A.** No, they do not. Moody's, for example, noted that "[r]egulated electric and gas  
4 companies are a diverse universe in terms of business model (ranging from  
5 vertically integrated to unbundled generation, transmission and/or distribution  
6 entities)."<sup>26</sup> I do not believe that Mr. O'Donnell has properly accounted for such  
7 diversity in his screening process and as such, his comparison group is not an  
8 appropriate proxy for Duke Energy Carolinas.

9 As a practical matter, Mr. O'Donnell's proxy group contains several  
10 companies whose operating characteristics differ significantly from those of Duke  
11 Energy Carolinas. CenterPoint Energy, Consolidated Edison, Northeast Utilities,  
12 PEPCO Holdings, Public Service Enterprises ("PEG"), and UIL Holdings, for  
13 example, are essentially distribution-only utilities. That is, they own little (in the  
14 case of CenterPoint, no) regulated electric generating capacity. Other companies,  
15 such as Integrys Energy, TECO Energy, Vectren, and Xcel Energy derive a  
16 significant portion of their financial results from regulated natural gas distribution  
17 operations. Another, Edison International, is involved in significant bankruptcy  
18 proceedings.<sup>27</sup> In many cases Mr. O'Donnell's proxy companies fail several  
19 fundamental screens; PEG, for example, has significant unregulated operations,  
20 derives a material portion of its income from regulated natural gas distribution  
21 operations, and does not operate regulated electric generating assets. Rebuttal

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<sup>26</sup> Moody's Investors Service, Rating Methodology: Regulated Electric and Gas Utilities, August 2009.

<sup>27</sup> SNL Financial, *Edison Mission files Chapter 11 reorganization plan*, December 17, 2012. Edison Mission Energy, a wholly-owned subsidiary of Edison International, filed for bankruptcy protection under Chapter 11 of the U.S. Bankruptcy Code.

Exhibit No. RBH-2 summarizes the screening criteria met and failed by each of Mr. O'Donnell's proxy companies.

**Q. DO YOU HAVE ANY COMMENTS REGARDING MR. O'DONNELL'S USE OF THE S&P QUALITY RANKINGS AS A SCREENING CRITERION?**

**A.** Yes, I disagree with Mr. O'Donnell's use of S&P's quality rankings in lieu of credit ratings. As a practical matter, changes in credit ratings are newsworthy events, and can, at a minimum, increase borrowing costs and access to capital, and in some cases have more far-reaching effects such as triggering redemptions, collateral requirements, and other contractual clauses. For instance, in disclosing risk factors in its 2012 SEC Form 10-K, the Company noted that:

The Duke Energy Registrants must meet credit quality standards and there is no assurance that they and their rated subsidiaries will maintain investment grade credit ratings. If the Duke Energy Registrants or their rated subsidiaries are unable to maintain investment grade credit ratings, they would be required under credit agreements to provide collateral in the form of letters of credit or cash, which may materially adversely affect their liquidity.<sup>28</sup>

The Duke Energy Registrants' businesses are financed to a large degree through debt and the maturity and repayment profile of debt used to finance investments often does not correlate to cash flows from their assets. Accordingly, as a source of liquidity for capital requirements not satisfied by the cash flow from their operations and to fund investments originally financed through debt instruments with disparate maturities, Duke Energy and the Subsidiary Registrants rely on access to short-term money markets as well as longer-term capital markets and the Subsidiary Registrants also rely on access to short-term intercompany borrowings. If the Duke Energy Registrants are not able to access capital at competitive rates or at all, the ability to finance their

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<sup>28</sup> Duke Energy Carolinas, LLC (as a Registrant), SEC Form 10-K for the Fiscal Year ended December 31, 2012, at 25.

1 operations and implement their strategy and business plan as  
2 scheduled could be adversely affected.<sup>29</sup>  
3

4 In reference to the effect of a credit downgrade on its derivative contracts, the  
5 Company noted that:

6 A downgrade below investment grade could also require the Duke  
7 Energy Registrants to post additional collateral in the form of  
8 letters of credit or cash under various credit agreements and trigger  
9 termination clauses in some interest rate derivative agreements,  
10 which would require cash payments. All of these events would  
11 likely reduce the Duke Energy Registrants' liquidity and  
12 profitability and could have a material adverse effect on their  
13 financial position, results of operations or cash flows.<sup>30</sup>  
14

15 Quality rankings, which attempt to distill historical data regarding earnings  
16 and dividends to a single ranking (*i.e.*, B, B+, A- etc.),<sup>31</sup> are far less relevant to  
17 the process of establishing a forward-looking ROE by reference to comparable  
18 companies than are credit ratings, which consider a broad array of current  
19 and potential regulatory, business, and financial risks.

20 **Q. DO YOU AGREE WITH MR. O'DONNELL'S CONSIDERATION OF**  
21 **DEC, THE PARENT COMPANY OF DUKE ENERGY CAROLINAS, IN**  
22 **HIS ANALYSES?**

23 **A.** No, I do not. It is my practice to exclude parent companies from the proxy groups  
24 of subsidiary utilities, as the inclusion of a parent involves circular logic.<sup>32</sup>  
25 Consequently, I did not included DEC in my ROE analyses.

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<sup>29</sup> *Ibid.*, at 27.

<sup>30</sup> *Ibid.*, at 25.

<sup>31</sup> See Standard & Poor's, *Quality Rankings Portfolio Performance, Risk, and Fundamental Analysis*, October 2005, at 5-7.

<sup>32</sup> Direct Testimony of Robert B. Hevert, at 13.

1 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING MR. O'DONNELL'S**  
2 **PROXY GROUP?**

3 **A.** For the reasons stated above, I believe Mr. O'Donnell's proxy group contains  
4 companies that are not fundamentally comparable to Duke Energy Carolinas and,  
5 therefore, is not appropriate for the purpose of estimating the Company's ROE.

*DCF Model Growth Rate Estimates*

6 **Q. WHAT GROWTH RATES DID MR. O'DONNELL CONSIDER IN HIS**  
7 **DCF ANALYSIS?**

8 **A.** As noted earlier, Mr. O'Donnell reviews a variety of growth rates, including: (1)  
9 the historical and projected "plowback ratio" (also referred to herein as  
10 "sustainable growth" rates or "retention growth" rates) as reported by Value Line;  
11 (2) the historical ten-year and five-year compound annual growth rates in earnings  
12 per share ("EPS"), book value per share ("BVPS"), and dividends per share  
13 ("DPS") as reported by Value Line; (3) the Value Line projected EPS, BVPS, and  
14 DPS growth rates; and (4) consensus projected EPS growth rates, as reported by  
15 Charles Schwab & Co.<sup>33</sup>

16 **Q. DO YOU AGREE WITH THE GROWTH RATE ASSUMPTIONS**  
17 **REFLECTED IN MR. O'DONNELL'S ANALYSIS?**

18 **A.** No, I do not. As to the use of dividend and book value growth rates, it is  
19 important to realize that earnings growth enables both. That is, book value can  
20 increase over time only through the addition of retained earnings, or with the  
21 issuance of new equity. Both of those factors are derivative of earnings: retained

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<sup>33</sup> See Direct Testimony of Kevin W. O'Donnell, Exhibit KWO-1.

1 earnings increases with the amount of earnings not distributed as dividends; and  
2 the price at which new equity is issued is a function of the EPS and the then-  
3 current Price/Earnings (“P/E”) ratio. Similarly, as noted in my Direct Testimony,  
4 earnings are the fundamental driver of a company’s ability to pay dividends.<sup>34</sup>  
5 Corporate decisions to manage the dividend payout ratio for the purpose of  
6 minimizing future dividend reductions, or to signal future earnings prospects can  
7 influence dividend growth rates in near-term periods in a manner that is  
8 disproportionate to earnings growth.

9 I also note that under the strict assumptions of the Constant Growth DCF  
10 model, earnings, dividends and stock prices all grow at the same, constant rate.  
11 As Rebuttal Exhibit No. RBH-3 demonstrates, under those assumptions, the  
12 assumed growth rate equals the rate of capital appreciation (*i.e.*, the stock price  
13 growth rate). Given that investors tend to value common equity on the basis of  
14 P/E ratios, the expected (and required) Return on Equity is a function of the long-  
15 term growth in earnings, not dividends or book value. It also is important to note  
16 that Value Line is the only service relied on by Mr. O’Donnell that provides DPS,  
17 BVPS, or retention growth projections. To the extent that the earnings projections  
18 services such as Zacks and First Call represent consensus estimates, the results are  
19 less likely to be biased in one direction or another as a result of an individual  
20 analyst.

21 In addition, Mr. O’Donnell reasons that the historical growth rates he  
22 presents are relevant to the determination of the Company’s Cost of Equity since

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<sup>34</sup> See Direct Testimony of Robert B. Hevert, at 21-22.

1 it is a “more global approach.”<sup>35</sup> To the extent that analysts such as those  
2 included in Mr. O’Donnell’s Charles Schwab consensus earnings growth estimate  
3 already consider historical information in arriving at their conclusions and  
4 recommendations, any additional consideration would over-weight the effect of  
5 historical data relative to the more relevant forward-looking projections.

6 Lastly, academic research clearly has indicated that measures of earnings  
7 and cash flow are strongly related to stock valuation.<sup>36</sup> As discussed below, that  
8 conclusion holds true for the universe of companies that Mr. O’Donnell  
9 considered in developing his proxy group. Consequently, neither dividend nor  
10 book value growth should be used in the application of the Constant Growth  
11 DCF model. Rather, projected earnings growth rates are the appropriate measure  
12 of long-term growth.

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<sup>35</sup> Direct Testimony of Kevin W. O’Donnell, at 34.

<sup>36</sup> In *The Risk Premium Approach to Measuring a Utility’s Cost of Equity*, published in Financial Management, Spring 1985, Brigham, Shome and Vinson noted that “evidence in the current literature indicates that (1) analysts’ forecasts are superior to forecasts based solely on time series data; and (2) investors do rely on analysts’ forecasts.” Similarly, in a review of literature regarding the extent to which analyst forecasts are reflected in stock prices (Using Analyst’s Growth Forecasts to Estimate Shareholder Required Rates of Return, Financial Management, Spring 1986), Harris noted: “VanderWeide and Carleton recently compare consensus [financial analyst forecasts] of earnings growth to 41 different historical growth measures. They conclude that ‘there is overwhelming evidence that the consensus analysts’ forecast of future growth is superior to historically-oriented growth measures in predicting the firm’s stock price...consistent with the hypothesis that investors use analysts’ forecasts, rather than historically-oriented growth calculations, in making stock buy and sell decisions.’” The VanderWeide and Carleton study was updated in 2004 under the direction of Dr. VanderWeide. The results of the updated study were consistent with the original study’s conclusions.

1   **Q.   PLEASE DESCRIBE THE ANALYSES YOU PERFORMED TO ASSESS**  
2       **THE RELATIONSHIP BETWEEN STOCK PRICES AND HISTORICAL**  
3       **AND PROJECTED EARNINGS, DIVIDEND AND BOOK VALUE**  
4       **GROWTH RATES.**

5   **A.**   I performed an analysis of the predictive capability of historical and projected  
6       earnings, book value and dividend growth estimates on the proxy company  
7       valuation levels. As discussed below, my analysis was structured to assess the  
8       ability of historical and projected earnings, book value and/or dividend growth  
9       estimates to explain proxy company relative valuation levels. In particular, my  
10      analyses examine the relationship between the current P/E ratios of the proxy  
11      companies used by Mr. O'Donnell and me, and their historical and projected EPS,  
12      BVPS and DPS growth rates, as provided by Value Line (*see* Rebuttal Exhibit  
13      No. RBH-4). The intent of those analyses was to determine whether historical  
14      and projected earnings, book value and dividend growth rates are statistically  
15      related to the companies' valuation levels.

16   **Q.   WHAT DID THOSE ANALYSES REVEAL?**

17   **A.**   As shown in Rebuttal Exhibit No. RBH-4, the analyses indicate that historical and  
18       projected book value and dividend growth are not statistically significant  
19       explanatory variables for P/E ratios; nor did historical earnings growth rates  
20       provide meaningful predictive information (in each instance the regression  
21       coefficients were negative). In fact, the analyses demonstrate that the only  
22       statistically significant, meaningful variable is the projected EPS growth rate.



1 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE USE OF NON-**  
2 **EARNINGS GROWTH RATES IN THE FORMULATION OF THE DCF**  
3 **MODEL FOR DUKE ENERGY CAROLINAS?**

4 **A.** Based on the results of my regression analyses, my conclusion is that it is not  
5 appropriate to rely on historical or projected growth rates of book value or  
6 dividend growth or historical measures of earnings growth in the Constant  
7 Growth DCF model.

8 **Q. DO YOU HAVE ANY CONCERNS WITH THE PROJECTED EPS**  
9 **GROWTH RATES THAT MR. O'DONNELL DID USE?**

10 **A.** Yes, in particular I note that in arriving at his estimated average growth rates, Mr.  
11 O'Donnell includes negative growth estimates. In doing so, Mr. O'Donnell  
12 implicitly has assumed that investors would consider committing capital to a  
13 company that is expected to have negative growth, in perpetuity. As Rebuttal  
14 Exhibit No. RBH-5 demonstrates, eliminating negative growth rates from Mr.  
15 O'Donnell's DCF analysis increases the mean projected EPS growth rate by 20 to  
16 58 basis points. However, given that Mr. O'Donnell's 4.50 percent to 5.00  
17 percent growth rate range for his proxy group (and 3.50 percent to 4.00 percent  
18 for DEC) is the result of his subjective judgment and cannot be replicated, it is  
19 difficult to say how removing negative and inappropriate growth rates would  
20 weigh in his analyses and recommendation.

1 **Q. HOW DID MR. O'DONNELL CALCULATE THE RETENTION**  
2 **GROWTH RATES USED IN HIS DCF ANALYSES?**

3 **A.** Mr. O'Donnell calculated the retention growth rate for each company in his DCF  
4 analysis by taking an average of one historical and three forecast values (2012,  
5 2013, 2014 and 2016-18) of the "percent retained to common equity" reported by  
6 Value Line. As Mr. O'Donnell explains, the estimate is calculated as the product  
7 of the expected earned Return on Common Equity ("r"), and the retention ratio  
8 (*i.e.*, the portion of earnings not paid out in dividends, or "b").<sup>37</sup>

9 **Q. DO YOU AGREE WITH MR. O'DONNELL'S ESTIMATE OF THE**  
10 **"PLOWBACK GROWTH" RATE THAT IS IN HIS DCF ANALYSIS?**

11 **A.** No, I do not. The full form of the "plowback growth," or retention growth,  
12 (sometimes referred to as "sustainable growth") model is based on the proposition  
13 that a firm's growth is a function of its expected earnings (represented as "r," or  
14 the expected Return on Common Equity), the extent to which it retains earnings to  
15 invest in the enterprise (represented by "b"), and the degree to which external  
16 financing enables future growth. The form of the model that Mr. O'Donnell relies  
17 on projects growth as a function of retained income, alone.<sup>38</sup> That is, Mr.  
18 O'Donnell's estimate of retention growth fails to account for future equity  
19 issuances that also can be a source of growth. If Mr. O'Donnell is going to  
20 consider a form of retention growth in his DCF analyses, he should use the "br +  
21 sv" form of the model, which reflects growth both from internally generated funds

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<sup>37</sup> See Direct Testimony of Kevin W. O'Donnell, at 17-18.

<sup>38</sup> *Ibid.*

1 (i.e., the “br” term) and from issuances of equity (i.e., the “sv” term). Failure to  
2 do so understates long-term growth, as defined by this model.

3 **Q. ARE THERE OTHER REASONS TO DOUBT THE RESULTS OF DCF**  
4 **ANALYSES THAT RELY ON RETENTION GROWTH FOR ELECTRIC**  
5 **UTILITIES IN PARTICULAR?**

6 **A.** Yes, there are. First, the fundamental premise of Mr. O’Donnell’s calculation is  
7 that future earnings will increase as the retention ratio increases. There are,  
8 however, several reasons why that may not be the case. As discussed earlier,  
9 management decisions to conserve cash for capital investments, to manage the  
10 dividend payout for the purpose of minimizing future dividend reductions, or to  
11 signal future earnings prospects can and do influence the dividend payout (and  
12 therefore earnings retention) in the near-term. Consequently, it is appropriate to  
13 determine whether the data used to calculate the retention growth rate support the  
14 assumption that higher earnings retention ratios necessarily are associated with  
15 higher future earnings growth rates.

16 **Q. DID YOU PERFORM ANY ANALYSIS TO TEST THAT ASSUMPTION?**

17 **A.** Yes, I did. Based on Value Line data as of July 5, 2013 for the proxy companies  
18 used by Mr. O’Donnell and me in this proceeding, I calculated (in each year of  
19 the historical periods) the dividend payout ratio, the retention ratio, and the  
20 subsequent five-year earnings growth rate. I then performed a regression analysis  
21 in which the dependent variable was the five-year earnings growth rate, and the  
22 explanatory variable was the earnings retention ratio. The purpose of that  
23 analysis was to determine whether the historical data empirically support the

1 assumption that higher retention ratios necessarily produce higher earnings  
2 growth rates.

3 **Q. WHAT DID THAT ANALYSIS REVEAL?**

4 A. As shown in Table 2 (*see* also Rebuttal Exhibit No. RBH-6) there was a *negative*  
5 relationship between the earnings retention ratio and the subsequent five-year  
6 earnings growth rate. That is, based on Value Line historical data, earnings  
7 growth actually decreased as the retention ratio increased.

8 **Table 2: Regression Results**

	Coefficient	Standard Error	t-Statistic
Intercept	0.121318	0.024153	5.022908
Retention Ratio	-0.074601	0.053371	-1.397776

9  
10 **Q. IS THERE PUBLISHED ACADEMIC RESEARCH THAT SUPPORTS**  
11 **YOUR FINDINGS?**

12 A. Yes, there is. In 2006, two articles appeared in Financial Analysts Journal, which  
13 addressed the theory that high dividend payouts (*i.e.*, low retention ratios) are  
14 associated with low future earnings growth.<sup>39</sup> Both of those articles cite a 2003  
15 study by Arnott and Asness<sup>40</sup> who found that, over the course of 130 years of  
16 data, future earnings growth is associated with high, rather than low, payout

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<sup>39</sup> See Ping Zhou, William Ruland, *Dividend Payout and Future Earnings Growth*, Financial Analysts Journal, Vol. 62, No. 3, 2006. See also Owain ap Gwilym, James Seaton, Karina Suddason, Stephen Thomas, *International Evidence on the Payout Ratio, Earnings, Dividends and Returns*, Financial Analysts Journal, Vol. 62, No. 1, 2006.

<sup>40</sup> See Robert Arnott, Clifford Asness, *Surprise: Higher Dividends = Higher Earnings Growth*, Financial Analysts Journal, Vol. 59, No. 1, 2003.

1 ratios.<sup>41</sup> In essence, the findings of all three studies are consistent with my  
2 findings regarding the relationship between retention ratios and future earnings  
3 growth for the proxy companies used by Mr. O'Donnell and me in this  
4 proceeding: there is a negative, not a positive relationship between the two.  
5 Considering those articles, it appears that my findings are not anomalous. Given  
6 the strong statistical results of my analyses, and the corroborating research  
7 discussed above, I believe that Mr. O'Donnell's reliance on the retention growth  
8 rate in his Constant Growth DCF model is misplaced.

9 **Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE APPROPRIATE**  
10 **GROWTH RATE FOR THE DCF MODEL?**

11 **A.** Based on the analyses and research noted above, my conclusion is that analysts'  
12 projections of earnings per share growth are the appropriate measure for the  
13 Constant Growth DCF model. As such, I have continued to rely on projected EPS  
14 growth rates from Value Line, Zacks, and First Call in developing my Constant  
15 Growth DCF results.

16 **Q. WHAT EFFECT WOULD THE USE OF PROJECTED EPS GROWTH**  
17 **RATES HAVE ON MR. O'DONNELL'S DCF ANALYSIS?**

18 **A.** As noted earlier, the growth rate ranges that support Mr. O'Donnell's DCF  
19 estimates (*i.e.*, 4.50 percent to 5.00 percent for the proxy group, 3.50 percent to  
20 4.00 percent for DEC) are based on his subjective judgment. As a result, there is  
21 no underlying analysis to be replicated. Therefore, it is difficult to say how each

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<sup>41</sup> Since the payout ratio is the inverse of the retention ratio, the authors found that future earnings growth is negatively related to the retention ratio.

1 of the growth rates presented in Mr. O'Donnell's testimony weighed in his DCF  
2 analysis and his conclusion.

*Mr. O'Donnell's Comparable Earnings Analysis*

3 **Q. PLEASE BRIEFLY SUMMARIZE MR. O'DONNELL'S COMPARABLE**  
4 **EARNINGS ANALYSIS.**

5 **A.** Mr. O'Donnell states that he uses the Comparable Earnings method in this case to  
6 assess the reasonableness of his DCF results, and to provide an "independent  
7 methodological estimate of the return that investors would consider reasonable"  
8 for Duke Energy Carolinas.<sup>42</sup> Mr. O'Donnell's Exhibit KWO-3 contains the  
9 realized ROCE from 2012 through the forecasted period up to 2018 for each of  
10 his proxy group companies, as provided by Value Line.

11 **Q. DO YOU AGREE WITH MR. O'DONNELL'S USE OF THE**  
12 **COMPARABLE EARNINGS ANALYSIS AS A CHECK ON THE**  
13 **REASONABLENESS OF HIS DCF RESULTS?**

14 **A.** No, I do not. As noted below, for example, the recent and projected realized  
15 ROCE for many of Mr. O'Donnell's proxy group companies is significantly  
16 diluted by recent or ongoing additions to net plant. The assumption that the Cost  
17 of Equity would materially decrease as capital investments increase, however, is  
18 contrary to market evidence.

19 **Q. HAVE YOU CONDUCTED ANY ANALYSES TO DEMONSTRATE HOW**  
20 **MR. O'DONNELL'S PROXY COMPANIES' EARNED RETURNS ON**

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<sup>42</sup> Direct Testimony of Kevin W. O'Donnell, at 23.

1           **COMMON EQUITY MAY BE AFFECTED BY RECENT OR ONGOING**  
2           **CAPITAL EXPENDITURES?**

3    A.    Yes, I have. To the extent that Mr. O'Donnell uses recent and near-term  
4           projected earned ROCE to validate the estimated required ROE, it is necessary  
5           that the determinants of the expected earned Return on Common Equity,  
6           including the projected level of sales efficiency, profitability, and capitalization  
7           ratios, remain constant over the projection period, and beyond.<sup>43</sup> If that is not the  
8           case, the model is an unreliable measure of the subject company's future expected  
9           earned ROCE. In order to assess the stability of those factors, I applied the  
10          "Dupont" formula, which decomposes the Return on Common Equity into three  
11          factors: the Profit Margin (net income/revenues), Asset Turnover (revenues/net  
12          plant), and the Equity Multiplier (net plant/equity).

13               As Rebuttal Exhibit No. RBH-7 demonstrates (using Mr. O'Donnell's  
14               proxy group), the product of those three factors is approximately equal (but for  
15               rounding) to Value Line's reported ROCE, on both an historical and projected  
16               basis. That analysis also shows that while all three components are expected to  
17               change over time, asset turnover has been trending lower as net plant has rapidly  
18               increased over the past few years.<sup>44</sup> Although profit margins also have increased  
19               somewhat over the same period, earned ROCE has trended downward coincident  
20               with the currently elevated capital investment cycle. Given that the fundamental

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<sup>43</sup> As discussed below, the ROE can be defined using the DuPont Equation in which  $ROE = \text{Tax Burden} \times \text{Interest Burden} \times \text{Operating Profit Margin} \times \text{Asset Turnover} \times \text{Leverage Ratio}$  or  $ROE = [\text{Net Profit/Pretax Profit}] \times [\text{Pretax Profit/EBIT}] \times [\text{EBIT/Sales}] \times [\text{Sales/Assets}] \times [\text{Assets/Equity}]$ , where EBIT is Earnings before interest and taxes. I use the terms sales efficiency and asset turnover interchangeably. See, for example, R. Brealey, S. Myers, J. Marcus, Fundamentals of Corporate Finance, Fourth Edition, at 459.

<sup>44</sup> An inverse relationship between growth in net assets and asset turnover was also demonstrated in my Direct Testimony. See Direct Testimony of Robert B. Hevert, at 34-35.

1 elements of earned ROCE are expected to change over time, I believe it is  
2 inappropriate to rely on recent and near-term projections of that measure as an  
3 estimate of investors long-term (that is, perpetual) expectations.

***Relevance and Application of the CAPM***

4 **Q. DOES MR. O'DONNELL INCLUDE THE CAPM IN HIS EVALUATION**  
5 **OF DUKE ENERGY CAROLINAS' ROE?**

6 **A.** No, he does not. Mr. O'Donnell states that he does not apply the CAPM because  
7 he believes that an underlying assumption of the CAPM is that "calculated  
8 risk premiums stay relatively constant over time," and that "[s]uch an  
9 assumption is just unrealistic."<sup>45</sup> Mr. O'Donnell further suggests that, because he  
10 believes that Beta coefficients may not reflect "sudden changes in a  
11 company's stock price," the CAPM could produce "meaningless answers."<sup>46</sup>  
12 Finally, Mr. O'Donnell concludes that the CAPM model is a "pure academic  
13 model," and that investors "simply do not use such an academic model in their  
14 daily 'real life' decisions."<sup>47</sup>

15 **Q. DO YOU AGREE WITH MR. O'DONNELL'S ASSESSMENT OF THE**  
16 **CAPM MODEL?**

17 **A.** No, I do not. As a preliminary matter, all financial models have an "academic"  
18 element. For example, Brigham, Shome, and Vinson addressed methods used to  
19 estimate the Cost of Equity for regulated utilities. In their introduction, the  
20 authors noted that:

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<sup>45</sup> Direct Testimony of Kevin W. O'Donnell, at 35.

<sup>46</sup> *Ibid.*, at 37.

<sup>47</sup> *Ibid.*, at 38.



1 In the mid-1960s, Myron Gordon and others began applying the  
2 theory of finance to help estimate utilities' costs of capital.  
3 Previously, the standard approach in cost of equity studies was  
4 the "comparable earnings method," which involved selecting a  
5 sample of unregulated companies whose investment risk was  
6 judged to be comparable to that of the utility in question,  
7 calculating the average return on book equity (ROE) of these  
8 sample companies, and setting the utility's service rates at a level  
9 that would permit the utility to achieve the same ROE as the  
10 comparable companies. This procedure has now been  
11 thoroughly discredited...and it has been replaced by three  
12 market-oriented approaches: (i) the DCF method, (ii) the bond-  
13 yield-plus-risk-premium method, and (iii) the CAPM, which is a  
14 specific version of the generalized bond-yield-plus-risk-premium  
15 approach.<sup>48</sup>

16 Similarly, an article published in Financial Analysts Journal surveyed  
17 financial analysts to determine the analytical techniques that are used in practice,  
18 and this included the CAPM.<sup>49</sup> And while Mr. O'Donnell chooses not to use the  
19 CAPM because there are certain elements of the model that require the  
20 application of reasoned judgment, the DCF model also is subject to disagreement  
21 as to its application; much of my Rebuttal Testimony speaks to the areas in which  
22 I believe Mr. O'Donnell has misapplied that model. Mr. O'Donnell's general  
23 4.50 percent to 5.00 percent growth estimate for his proxy group, for example, is  
24 the result of his judgment in reviewing various measures of growth. As noted  
25 earlier, while the CAPM analyses presented in my Direct Testimony can be  
26 replicated, Mr. O'Donnell's DCF growth rate estimates cannot.

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<sup>48</sup> Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, Spring, 1985.

<sup>49</sup> See Stanley B. Block, *A Study of Financial Analysts: Practice and Theory*, Financial Analysts Journal, July/August, 1999.

1 **Q. DO YOU AGREE WITH MR. O'DONNELL'S STATEMENT THAT BETA**  
2 **COEFFICIENTS CALCULATED OVER EXTENDED TIME PERIODS**  
3 **MAY NOT REFLECT CURRENT MARKET CONDITIONS?**<sup>50</sup>

4 **A.** As a general matter, I do. As noted on page 28 of my Direct Testimony,  
5 Bloomberg and Value Line calculate Beta coefficients over two and five  
6 year periods, respectively. Consequently, those Beta coefficients may not  
7 adequately reflect investors' sentiments during periods of rapid and substantial  
8 market changes. I also agree that the Market Risk Premium ("MRP") is not static;  
9 that is why I perform several forward-looking analyses to estimate that variable.  
10 However, in my view, ensuring that the model's inputs reflect current market  
11 realities is a far more reasonable approach than simply dismissing the CAPM as  
12 "academic."

13 **Q. DO YOU ALSO AGREE WITH MR. O'DONNELL'S ASSERTION THAT**  
14 **THE CAPM IS NOT USED IN THE "REAL WORLD"?**

15 **A.** No, I do not. As noted earlier, the survey by Stanley Block clearly indicated that  
16 the CAPM is used by practitioners. In fact, a 2001 article by Professors Graham  
17 and Harvey demonstrated that industry practitioners are far more likely to use the  
18 CAPM than the DCF model.<sup>51</sup> In any event, since market conditions can affect  
19 different models in different ways, the application of those models, and the  
20 interpretation of their results, requires the use of informed judgment.

21 **Q. WHAT IS YOUR RESPONSE TO MR. O'DONNELL'S CONCERN THAT**  
22 **YOU USED AN EXPECTED MARKET RATE OF RETURN HIGHER**

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<sup>50</sup> See Direct Testimony of Kevin W. O'Donnell, at 37-38.

<sup>51</sup> John R. Graham, Campbell R. Harvey, *The Theory and Practice of Corporate Finance: Evidence from the Field*, *Journal of Financial Economics*, 2001.

1        **THAN THE 9.80 PERCENT HISTORICAL RETURN ON LARGE**  
2        **MARKET CAPITALIZATION COMPANIES NOTED BY DR. ROGER**  
3        **IBBOTSON?**

4    A.    Mr. O'Donnell notes his concern following a discussion of a November 2012  
5        article published by *Market Watch* of the Wall Street Journal, in which Dr.  
6        Ibbotson states that the long-term return on large market capitalization companies  
7        has been 9.80 percent since 1926.<sup>52</sup> It is important to note, however, that the 9.80  
8        percent referenced by Dr. Ibbotson is the *geometric* average return; the  
9        corresponding *arithmetic* average return is 11.80 percent.<sup>53</sup> Morningstar (which  
10       now publishes the Ibbotson study) has stated that for the purpose of estimating the  
11       forward-looking Cost of Equity, the relevant measure is the arithmetic, rather than  
12       the geometric mean. The returns used in my analyses also do not appear  
13       unfounded considering that the overall market return in 2012 was 13.41 percent.<sup>54</sup>

14       Since Mr. O'Donnell concludes that the market return estimates used in  
15       my analyses are too high relative to historical levels, it also is instructive to  
16       understand how often various ranges of total returns actually have occurred over  
17       the 1926 to 2012 period (that is, the period covered in the Ibbotson analysis). To  
18       perform that analysis, I gathered the annual return on Large Company Stocks  
19       reported by Morningstar, produced a histogram of those observations, and  
20       calculated the probability that a given market return estimate would be observed.

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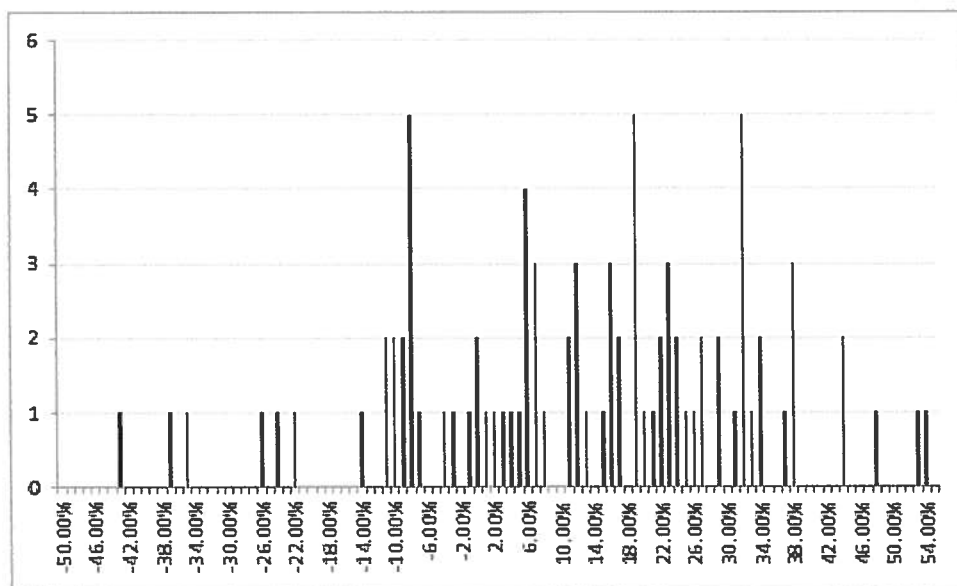
<sup>52</sup> See Direct Testimony of Kevin W. O'Donnell, at 26.

<sup>53</sup> See Morningstar, Inc., *2012 Ibbotson S&P 500 Risk Premia Over Time Report Estimates for 1926–2011*, at 6.

<sup>54</sup> See also Chart 3. (Note, market return of 13.41 percent includes dividends.)

1 The results of that analysis, which are presented in Chart 5, demonstrate that  
2 returns of 13.00 percent and higher actually occurred quite often.

3 **Chart 5: Frequency Distribution of Observed Market Returns, 1926 - 2012**<sup>55</sup>



4  
5 In fact, the 13.00 percent and 12.93 percent market return estimates used  
6 in the CAPM analyses accompanying my Direct Testimony represent  
7 approximately the 50th percentile of the actual returns observed from 1926 to  
8 2012.<sup>56</sup> In other words, of the 87 annual observations, 44 were 12.93 percent or  
9 higher. By that measure, my estimate is not too high; it is entirely consistent with  
10 the historical experience that Mr. O'Donnell considers to be relevant.

<sup>55</sup> Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 182-183.

<sup>56</sup> See Exhibit RBH-2.

*Relative Risk of Debt and Equity*

1   **Q.   WHAT IS YOUR RESPONSE TO MR. O'DONNELL'S SUGGESTION**  
2       **THAT INVESTORS CONSIDER UTILITY STOCKS TO BE "BOND**  
3       **EQUIVALENTS"?<sup>57</sup>**

4   **A.**   While it may be Mr. O'Donnell's opinion that investors consider utility ROEs as  
5       equivalent to the cost of debt, he provides no support for his assertion that electric  
6       utilities in general (and the Company in particular) essentially have no residual  
7       (that is, equity) risk and somehow take on the risk characteristics of debt. Under  
8       any condition, debt investors are the beneficiaries of a contractual obligation to  
9       make interest and principal payments, while equity investors bear the "residual  
10      risk" associated with ownership. In light of that priority and the incremental  
11      security provided by the debt agreements, yields on long-term debt are below  
12      returns required by equity investors. For that reason alone, it is difficult to  
13      imagine that the Cost of Equity would approach the cost of debt. More  
14      importantly, it is clear that investors consider equity to be far more risky than  
15      debt.

16   **Q.   IS IT POSSIBLE TO TEST THE CONCLUSION THAT THE EQUITY**  
17       **RISK FOR UTILITY COMPANIES APPROACHES THE RISK**  
18       **ASSOCIATED WITH LONG-TERM BONDS?**

19   **A.**   Yes, it is. One approach is to consider the volatility of each investment relative to  
20       the broader market. An important component of the CAPM is the Beta  
21       coefficient, which measures the volatility of the underlying security relative to the

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<sup>57</sup> Direct Testimony of Kevin W. O'Donnell, at 14.

1 volatility of the market as a whole.<sup>58</sup> While I understand that Mr. O'Donnell is  
2 concerned with using the CAPM as an estimate of the Cost of Equity, the Beta  
3 coefficient, which is a widely accepted measure of relative risk, can be used to  
4 test his theory that investors currently are "looking at utility stocks as somewhat  
5 'bond equivalents'."<sup>59</sup> If Mr. O'Donnell is correct, the Beta coefficients of utility  
6 stocks and bonds would be equivalent. If there is a significant difference between  
7 the two, that difference would indicate that investors see utility debt and equity as  
8 separate asset classes, with distinct risk and return profiles. That is, the extent  
9 that the implied debt Beta coefficient is well below the equity Beta coefficient,  
10 Mr. O'Donnell's assertion that utilities are an alternative investment to long-term  
11 bonds is called into question.

12 As a practical matter, debt holders benefit from the contractual obligation  
13 of the debtor to pay both principal and interest and as such, the volatility of debt  
14 securities relative to the broad equity market tends to be quite low; in fact, a  
15 common assumption is that debt Beta coefficients are near-zero. In the 1984  
16 edition of their widely-used text, for example, Brealey and Myers note that:

17 Debt betas are typically close to zero – close enough that for large  
18 blue-chip companies many financial analysts just assume  $\beta_{\text{debt}} =$   
19 0.<sup>60</sup>

20 In their 2008 text, Ross, Westerfield and Jaffe state that "[t]he beta of debt  
21 is very low in practice."<sup>61</sup>

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<sup>58</sup> See Direct Testimony of Robert B. Hevert, at 25.

<sup>59</sup> Direct Testimony of Kevin C. O'Donnell, at 14.

<sup>60</sup> Richard Brealey and Stewart Myers, Principles of Corporate Finance, 2nd Ed., 1984, McGraw-Hill, at 175.

<sup>61</sup> Stephen Ross, Randolph Westerfield, Jeffery Jaffe, Corporate Finance, 8th Ed., 2008, McGraw-Hill/Irwin, at 351.

1           The debt Beta coefficients of Baa-rated utilities can be calculated using  
2           the average yield on that debt. The 30-day average of the Moody's Baa-rated  
3           Utility Bond Index is 5.05 percent as of July 5, 2013 and the average risk-free rate  
4           over that same time period is 3.39 percent.<sup>62</sup> For the sake of discussion, using the  
5           Bloomberg *ex-ante* Market Risk Premium contained on page 2 of Exhibit No.  
6           RBH-2, the Beta coefficient for Moody's Baa-rated Utility Bond Index is 0.17  
7           (5.05 percent = 3.39 percent + (0.17 x 9.88 percent)). The Bloomberg equity Beta  
8           coefficients for the proxy group presented in Exhibit No. RBH-3 range from 0.52  
9           to 0.90 with an average of 0.72, more than four times the implied debt Beta  
10          coefficient. Thus, actual market data does not support the notion that investors  
11          consider utility stocks and bonds to be substitutes or surrogates.

12           In any event, (as noted earlier) since the beginning of 2012 utility stocks  
13          have been among the worst performing sectors of the S&P 500. On that basis, it  
14          appears that investors have looked on utility stocks with increasing disfavor; they  
15          have not been a "safe harbor" relative to other industry sectors.

***Relevance of Recently Authorized ROEs***

16   **Q.   PLEASE RESPOND TO MR. O'DONNELL'S OBSERVATION THAT**  
17       **SINCE THE BEGINNING OF 2013 THE AVERAGE AUTHORIZED**  
18       **ELECTRIC UTILITY ROE HAS BEEN 9.77 PERCENT.<sup>63</sup>**

19   **A.   Mr. O'Donnell's Exhibit KWO-4 provides data for 27 rate cases, including rate**  
20       **cases for distribution-only electric utilities, completed in 2013. Excluding rate**  
21       **cases involving generation-specific rate riders (Virginia Electric & Power Co.)**

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<sup>62</sup>       Source: Bloomberg Financial.

<sup>63</sup>       Direct Testimony of Kevin W. O'Donnell, at 28.

1 and a duplicate docket (KCP&L), that data includes only nine vertically integrated  
2 authorized ROEs, all of which are included in Mr. Chriss' Exhibit SWC-3. As  
3 shown in Rebuttal Exhibit No. RBH-1, three of the nine authorized ROEs were  
4 10.20 percent or higher. The one ROE authorized by a "more credit supportive"  
5 jurisdiction since the beginning of 2013 was 10.30 percent. During the same  
6 period, the mean and median of authorized ROEs in jurisdictions that are  
7 considered by S&P to be either "credit supportive" or "more credit supportive"  
8 were 10.10 percent and 10.20 percent, respectively. Consequently, the data  
9 contained in Exhibit KWO-4 continues to support the reasonableness of the 10.20  
10 percent stipulated ROE.

11 **V. CONCLUSIONS AND RECOMMENDATIONS**

12 **Q. WHAT ARE YOUR OVERALL CONCLUSIONS AND**  
13 **RECOMMENDATIONS?**

14 **A.** As discussed throughout my ROE Stipulation Support and Rebuttal Testimony, I  
15 continue to support the 10.50 percent to 11.50 percent ROE range recommended  
16 in my Direct Testimony. Nonetheless, I recognize the benefits associated with the  
17 Company's decision to enter into the ROE Stipulation and believe that the  
18 stipulated ROE of 10.20 percent is a reasonable resolution to an otherwise  
19 contested issue.

20 Duke Energy Carolinas, as a separate entity, has maintained a credit  
21 profile that is somewhat stronger than the operating utility companies held within  
22 the proxy group (*see* Rebuttal Exhibit No. RBH-8). The effect of that profile is to  
23 enable the Company to access the debt markets at very competitive rates; those



1 lower rates accrue to the benefit of ratepayers. In order to maintain that benefit, it  
2 is important for the Company to maintain its credit profile, including the cash  
3 flow based metrics that are dependent on the authorized ROE. As noted above,  
4 Standard & Poor's considers South Carolina to be a "More Credit Supportive"  
5 jurisdiction. To the extent that the Commission substantially departs from its  
6 recent practice, or authorizes an ROE that deviates from those available in other,  
7 "more credit supportive" jurisdictions, it is quite possible that the Company's  
8 credit profile would come under pressure.

9 Finally, for the reasons discussed in the rebuttal portion of my testimony, I  
10 disagree with Mr. O'Donnell's conclusion that 9.00 percent represents a  
11 reasonable estimate of the ROE to be used in this proceeding.

12 **Q. DOES THIS CONCLUDE YOUR ROE STIPULATION SUPPORT AND**  
13 **REBUTTAL TESTIMONY?**

14 **A.** Yes, it does.  
15

2012 - 2013 Reported Authorized Returns on Equity, Electric Utility Rate Cases

State [1]	Docket [1]	Utility [1]	Authorized ROE [1]	Decision Date [1]	Vertically Integrated ("V") or T&D ("D") [2]	S&P Credit Supportive Ranking [3]	Vertically Integrated ROE
SC	D-2011-271-E	Duke Energy Carolinas LLC	10.50%	1/25/2012	V	4	10.50%
NC	D-E-7, Sub 989	Duke Energy Carolinas LLC	10.50%	1/27/2012	V	3	10.50%
MI	C-U-16801	Indiana Michigan Power Co.	10.20%	2/15/2012	V	4	10.20%
OR	D-UE-233	Idaho Power Co.	9.90%	2/23/2012	V	3	9.90%
FL	D-110138-EI	Gulf Power Co.	10.25%	2/27/2012	V	3	10.25%
ND	C-PU-10-657	Northern States Power Co. - MN	10.40%	2/29/2012	V	3	10.40%
MN	D-E-002GR-10-971	Northern States Power Co. - MN	10.37%	3/29/2012	V	3	10.37%
HI	D-2009-0164	Hawaii Electric Light Co.	10.00%	4/4/2012	V	2	10.00%
CO	D-11AL-947E	Public Service Co. of CO	10.00%	4/26/2012	V	3	10.00%
HI	D-2009-0163	Maui Electric Company Ltd	10.00%	5/2/2012	V	2	10.00%
WA	D-UE-111048	Puget Sound Energy Inc.	9.80%	5/7/2012	V	2	9.80%
AZ	D-E-01345A-11-0224	Arizona Public Service Co.	10.00%	5/15/2012	V	2	10.00%
IL	D-11-0721	Commonwealth Edison Co.	10.05%	5/29/2012	D	2	
MI	C-U-16794	Consumers Energy Co.	10.30%	6/7/2012	V	4	10.30%
NY	C-11-E-0408	Orange & Rockland Utils Inc.	9.40%	6/14/2012	D	2	
WI	D-6680-UR-118 (elec)	Wisconsin Power and Light Co.	10.40%	6/15/2012	V	4	10.40%
WY	D-20003-114-ER-11 (elec)	Cheyenne Light Fuel Power Co.	9.60%	6/18/2012	V	2	9.60%
SD	D-EL11-019	Northern States Power Co. - MN	9.25%	6/19/2012	V	3	9.25%
MI	C-U-16830	Wisconsin Electric Power Co.	10.10%	6/26/2012	V	4	10.10%
HI	D-2010-0080	Hawaiian Electric Co.	10.00%	6/29/2012	V	2	10.00%
OK	Ca-PUD201100087	Oklahoma Gas and Electric Co.	10.20%	7/9/2012	V	3	10.20%
WY	D-20000-405-ER-11	PacificCorp (Rocky Mountain Power)	9.80%	7/16/2012	D	2	9.80%
MD	C-9285	Delmarva Power & Light Co.	9.81%	7/20/2012	V	2	
MD	C-9286	Potomac Electric Power Co.	9.31%	7/20/2012	D	2	
TX	D-39896	Entergy Texas Inc.	9.80%	9/13/2012	V	2	9.80%
IL	D-12-0001	Ameren Illinois	10.05%	9/19/2012	D	2	
UT	D-11-035-200	PacificCorp (Rocky Mountain Power)	9.80%	9/19/2012	V	2	9.80%
DC	FC-1087	Potomac Electric Power Co.	9.50%	9/26/2012	D	1	
NJ	D-ER-11080469	Atlantic City Electric Co.	9.75%	10/23/2012	D	3	
WI	D-6690-UR-121 (Elec)	Wisconsin Public Service Corp.	10.30%	10/24/2012	V	4	10.30%
WI	D-3270-UR-118 (elec)	Madison Gas and Electric Co.	10.30%	11/9/2012	V	4	10.30%
WI	D-05-UR-106 (WEP-Elec)	Wisconsin Electric Power Co.	10.40%	11/28/2012	V	4	10.40%
CA	A-12-02-014	California Pacific Electric Co.	9.88%	11/29/2012	V	4	9.88%
DE	D-11-528	Delmarva Power & Light Co.	9.75%	11/29/2012	D	1	
IL	D-12-0293	Ameren Illinois	9.71%	12/5/2012	D	2	
PA	D-R-2012-2290597	PPL Electric Utilities Corp.	10.40%	12/5/2012	D	3	
MO	C-ER-2012-0166	Union Electric Co.	9.80%	12/12/2012	V	2	9.80%
FL	D-120015-EI	Florida Power & Light Co.	10.50%	12/13/2012	V	3	10.50%
KS	D-12-KCPE-764-RTS	Kansas City Power & Light	9.50%	12/13/2012	V	3	9.50%
WI	D-4220-UR-118 (elec)	Northern States Power Co. - WI	10.40%	12/14/2012	V	4	10.40%
IL	D-12-0321	Commonwealth Edison Co.	9.71%	12/19/2012	D	2	
SC	D-2012-218-E	South Carolina Electric & Gas	10.25%	12/19/2012	V	4	10.25%
CA	Ap-12-04-018 (Elec)	Pacific Gas and Electric Co.	10.40%	12/20/2012	V	4	10.40%
CA	Ap-12-04-016 (Elec)	San Diego Gas & Electric Co.	10.30%	12/20/2012	V	4	10.30%
CA	Ap-12-04-015	Southern California Edison Co.	10.45%	12/20/2012	V	4	10.45%
KY	C-2012-00221	Kentucky Utilities Co.	10.25%	12/20/2012	V	3	10.25%
KY	C-2012-00222 (elec.)	Louisville Gas & Electric Co.	10.25%	12/20/2012	V	3	10.25%
OR	D-UE-246	PacificCorp	9.80%	12/20/2012	V	3	9.80%
RI	4323	Narragansett Electric Co.	9.50%	12/20/2012	D	2	
NC	D-E-22, Sub 479	Virginia Electric & Power Co.	10.20%	12/21/2012	V	3	10.20%
WA	D-UE-120436	Avista Corp.	9.80%	12/26/2012	V	2	9.80%
MO	ER-2012-0174	Kansas City Power & Light	9.70%	1/9/2013	V	2	9.70%
MO	ER-2012-0175	KCP&L Greater Missouri Op Co.	9.70%	1/9/2013	V	2	9.70%
IN	44075	Indiana Michigan Power Co.	10.20%	2/13/2013	V	3	10.20%
MD	9299	Baltimore Gas and Electric Co.	9.75%	2/22/2013	D	2	
LA	U-32220	Southwestern Electric Power Co.	10.00%	2/27/2013	V	3	10.00%
NY	12-E-0201	Niagara Mohawk Power Corp.	9.30%	3/14/2013	D	2	
ID	AVU-E-12-08	Avista Corp.	9.80%	3/27/2013	V	3	9.80%
OH	12-1682-EL-AIR	Duke Energy Ohio Inc.	9.84%	5/11/2013	D	3	
MI	U-17087	Consumers Energy Co.	10.30%	5/15/2013	V	4	10.30%
NC	E-2, Sub 1023	Duke Energy Progress Inc.	10.20%	5/30/2013	V	3	10.20%
HI	2011-0092	Maui Electric Company Ltd	9.00%	5/31/2013	V	2	9.00%
AZ	E-01933A-12-0291	Tucson Electric Power Co.	10.00%	6/11/2013	V	1	10.00%
NJ	ER-12121071	Atlantic City Electric Co.	9.75%	6/21/2013	D	3	
Average			9.98%				10.06%
Median			10.00%				10.15%
Minimum			9.00%				9.00%
Maximum			10.50%				10.50%

Vertically Integrated Companies:

S&P Ranking	S&P Score	Mean Authorized ROE	Median Authorized ROE
More Credit Supportive	4	10.30%	10.30%
Credit Supportive	3	10.09%	10.20%
Less Credit Supportive	2	9.77%	9.80%
Least Credit Supportive	1	10.00%	10.00%
Credit Supportive + More Credit Supportive	3 & 4	10.18%	10.25%

Count of Vertically Integrated Authorized ROEs 10.20% or above: 24

Count of Vertically Integrated Authorized ROEs below 10.20%: 24

2012 - PRESENT:

2013 ONLY:

S&P Ranking	S&P Score	Mean Authorized ROE	Median Authorized ROE
More Credit Supportive	4	10.30%	10.30%
Credit Supportive	3	10.05%	10.10%
Less Credit Supportive	2	9.47%	9.70%
Least Credit Supportive	1	10.00%	10.00%
Credit Supportive + More Credit Supportive	3 & 4	10.10%	10.20%

Count of Vertically Integrated Authorized ROEs 10.20% or above: 3

Count of Vertically Integrated Authorized ROEs below 10.20%: 6

[1] Sources: Exhibit SWC-3 and Regulatory Research Associates

[2] Source: Regulatory Research Associates, *Electric Industry Restructuring: Tier Redefinition and Update*, August, 1 2012. "Tier 1" restructuring states considered T&D.

[3] Source: Standard & Poor's, *Standard & Poor's Revises Its U.S. Utility Regulatory Assessments*, December 28, 2012.

## Proxy Group Comparison

Company	Ticker	Hevert Proxy Group	O'Donnell Proxy Group
ALLETE, Inc.	ALE	[4]	✓
Alliant Energy Corporation	LNT	[4]	✓
American Electric Power Company, Inc.	AEP	✓	✓
Black Hills Corporation	BKH	[4]	✓
CenterPoint Energy	CNP	[2], [4]	✓
Cleco Corporation	CNL	✓	✓
CMS Energy	CMS	[4]	✓
Consolidated Edison, Inc.	ED	[2], [4], [5]	✓
DTE Energy Company	DTE	[4]	✓
Dominion Resources	D	[4]	✓
Duke Energy	DUK	[7]	✓
Edison International	EIX	[6]	✓
Empire District Electric Co.	EDE	✓	
El Paso Electric	EE	[5]	✓
Exelon Corporation	EXC	[2], [3], [5]	✓
First Energy	FE	[4]	✓
Great Plains Energy, Inc.	GXP	✓	
Hawaiian Electric Industries, Inc.	HE	[5]	✓
IDACORP, Inc.	IDA	✓	✓
Integrus Energy	TEG	[6]	✓
MGE Energy	MGEE	[4]	✓
Northeast Utilities	NU	[2]	✓
NV Energy	NVE	[1]	✓
Otter Tail Corporation	OTTR	✓	✓
PEPCO Holdings	POM	[2], [5]	✓
PG&E Corporation	PCG	[4], [5]	✓
PPL Corporation	PPL	[3]	✓
Pinnacle West Capital Corporation	PNW	✓	✓
PNM Resources, Inc.	PNM	✓	
Public Service Enterprises	PEG	[2], [3], [4]	✓
Portland General Electric Company	POR	✓	✓
SEMPRA Energy	SRE	[4]	✓
Southern Company	SO	✓	
TECO Energy, Inc.	TE	[4]	✓
UIL Holdings	UIL	[2], [4], [5]	✓
Vectren Corporation	VVC	[4]	✓
Westar Energy, Inc.	WR	✓	✓
Xcel Energy Inc.	XEL	[4]	✓

## Notes:

[1] Not rated investment grade (NVE was upgraded to investment grade May 30, 2013.)

[2] Not a vertically integrated utility

[3] Less than 60% of operating income from regulated operations

[4] Less than 90% of regulated operating income from electric operations

[5] Less than 10% net generation from coal

[6] Significant losses in a particular operating segment makes it difficult to assess the degree to which regulated electric utility will contribute to company's financial performance

[7] Parent company excluded to avoid circular logic; While not in his proxy group, Mr. O'Donnell performed a DCF analysis using Duke Energy

Last Measurement	
Dividend Yield	4.56% [1]
Assume g = Allowed RCE	10.56% [1]
Payoff	87.59% [1]
Payoff Rate	75 [1]
Book Value/Share	

UNLEVERED GROWTH RATE ALLOWANCE RCE	
Dividend Yield	4.56% [1]
Assume g = Allowed RCE	10.56% [1]
Payoff	87.59% [1]
Payoff Rate	75 [1]
Book Value/Share	

UNLEVERED GROWTH RATE ALLOWANCE RCE	
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Assume g = Allowed RCE	10.56% [1]
Payoff	87.59% [1]
Payoff Rate	75 [1]
Book Value/Share	

[1]Note: Illustrative only

UNLEVERED GROWTH RATE ALLOWANCE RCE	
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Payoff	87.59% [1]
Payoff Rate	75 [1]
Book Value/Share	

[1]Note: Illustrative only

Growth Rate Regressions

Company	Ticker	[1] Current P/E	[2] Dividend Growth Rate	[3] 16-Year Historical Book Value Growth Rate	[4] EPS Growth Rate	[5] Dividend Growth Rate	[6] 5-Year Historical Book Value Growth Rate	[7] EPS Growth Rate	[8] Dividend Growth Rate	[9] 5-Year Projected Book Value Growth Rate	[10] EPS Growth Rate
Allite	ALE	17.96	NA	NA	NA	4.50%	5.50%	-2.50%	3.50%	4.00%	7.00%
Alliant Energy	LNT	15.14	-1.50%	2.00%	3.50%	8.00%	3.50%	4.00%	4.50%	4.00%	5.00%
Amer. Elec. Power	AEP	14.35	-3.00%	2.50%	2.00%	4.00%	4.50%	1.00%	4.00%	4.00%	4.50%
Black Hills	BKH	21.15	2.50%	5.00%	-5.50%	2.00%	3.00%	-8.00%	2.50%	3.00%	11.50%
Centerpoint Energy	CNP	18.79	-4.50%	-4.00%	-1.50%	7.00%	13.50%	3.00%	4.00%	5.50%	4.50%
Cleco Corp.	CNL	18.43	2.50%	8.00%	5.50%	4.50%	9.00%	13.00%	10.00%	5.00%	5.50%
CMS Energy Corp.	CMS	16.68	-5.00%	-1.50%	18.00%	NA	3.00%	12.50%	8.00%	5.50%	5.50%
Consol. Edison	ED	15.98	1.00%	4.00%	2.00%	1.00%	4.50%	3.00%	1.50%	3.50%	2.50%
DTE Energy	DTE	16.26	1.00%	4.00%	2.00%	2.00%	4.00%	6.00%	5.50%	4.00%	4.00%
Dominion Resources	D	17.65	4.50%	2.50%	5.00%	7.00%	3.50%	7.00%	5.50%	4.50%	6.00%
Edison Int'l	EDX	13.58	NA	11.50%	NA	3.00%	5.50%	2.50%	5.50%	4.50%	2.50%
El Paso Electric	EE	15.14	NA	8.50%	9.00%	NA	8.50%	13.00%	16.50%	5.00%	3.00%
Exelon Corp.	EXC	15.17	13.50%	6.50%	5.00%	4.50%	9.00%	-2.50%	-6.50%	5.50%	-2.50%
FirstEnergy Corp.	FE	13.74	4.00%	2.50%	-1.00%	3.50%	1.00%	-8.00%	NA	2.50%	3.50%
Hawaiian Elec.	HE	15.65	NA	2.00%	-0.50%	NA	2.00%	2.00%	2.00%	4.50%	5.50%
IDACORP, Inc.	IDA	14.52	-4.00%	4.00%	1.50%	1.00%	5.50%	10.00%	7.00%	4.50%	2.00%
Integrus Energy	TEG	14.43	2.50%	5.50%	2.00%	3.00%	0.50%	-0.50%	0.50%	3.50%	3.50%
MGE Energy	MGE	18.01	1.50%	6.50%	5.00%	2.00%	5.50%	6.00%	3.50%	5.00%	5.50%
Northeast Utilities	NU	16.70	9.50%	4.00%	10.50%	9.50%	6.00%	13.00%	8.00%	6.00%	8.00%
NV Energy Inc.	NVE	18.05	NA	-0.50%	NA	NA	4.50%	4.00%	12.00%	3.50%	8.00%
Otter Tail Corp.	OTTR	20.16	1.50%	3.50%	-9.50%	0.50%	-1.00%	-18.50%	1.50%	2.00%	21.50%
Pepco Holdings	POW	17.57	NA	0.50%	-4.00%	1.00%	NA	-3.50%	1.00%	2.00%	6.00%
PG&E Corp.	PCG	22.89	NA	11.50%	NA	6.50%	6.00%	-0.50%	2.50%	3.00%	4.00%
PPL Corp.	PPL	13.81	9.00%	10.50%	4.00%	5.50%	6.00%	2.00%	2.00%	5.00%	NA
Pinnacle West Capital	PNW	15.75	4.00%	2.00%	NA	2.50%	NA	2.50%	2.00%	3.50%	5.00%
Portland General	POR	16.11	NA	NA	NA	14.50%	2.00%	4.00%	3.50%	3.50%	3.50%
Public Serv. Enterprise	PEG	15.93	2.50%	8.00%	4.50%	4.00%	9.00%	6.50%	1.50%	4.00%	-2.50%
SEMPRA Energy	SRE	18.95	7.00%	12.00%	5.50%	10.50%	7.50%	1.50%	7.50%	4.50%	4.50%
TECO Energy	TE	17.88	-4.50%	-2.50%	-5.50%	2.00%	4.00%	0.50%	2.00%	2.50%	3.50%
UIL Holdings	UIL	17.29	NA	0.50%	-1.50%	NA	2.00%	3.50%	NA	4.50%	4.00%
Vectren Corp.	VVC	16.82	3.00%	4.00%	3.00%	2.50%	3.00%	1.00%	2.50%	4.00%	6.50%
Westar Energy	WR	14.11	NA	NA	16.00%	5.00%	4.50%	1.50%	3.00%	5.00%	6.00%
Xcel Energy Inc.	XEL	15.11	-3.00%	1.50%	2.00%	3.00%	4.50%	5.50%	4.50%	4.50%	4.50%

Notes:

Source: Value Line, data downloaded as of July 2, 2013

SUMMARY OUTPUT X = 10-year Historical DPS Growth  
Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.063790					
R Square	0.004069					
Adjusted R Square	-0.043356					
Standard Error	2.086771					
Observations	23					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	0.373627	0.373627	0.065800	0.772461	
Residual	21	91.446921	4.354615			
Total	22	91.820548				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.595550	0.469476	35.349116	0.000000	15.619222	17.571878
Dividend Growth Rate	-2.699195	9.214883	-0.292917	0.772461	-21.862594	16.464204

SUMMARY OUTPUT X = 10-year Historical BPS Growth  
Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.000160					
R Square	0.000000					
Adjusted R Square	-0.035714					
Standard Error	2.290443					
Observations	30					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	0.000004	0.000004	0.000001	0.999331	
Residual	28	146.891583	5.246128			
Total	29	146.891587				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.688971	0.598580	27.880949	0.000000	15.462836	17.915106
Book Value Growth Rate	0.008730	10.320085	0.000846	0.999331	-21.131005	21.148465

SUMMARY OUTPUT X = 10-year Historical EPS Growth  
Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.388606					
R Square	0.151014					
Adjusted R Square	0.117055					
Standard Error	1.854931					
Observations	27					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	15.300770	15.300770	4.440902	0.045153	
Residual	25	86.010260	3.440770			
Total	26	101.320030				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.827666	0.396516	42.438810	0.000000	16.011026	17.644306
EPS Growth Rate	-12.762321	6.052027	-2.108768	0.045153	-25.226704	-0.297938

SUMMARY OUTPUT

X = 5-year Historical DPS Growth  
Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.070881					
R Square	0.005024					
Adjusted R Square	-0.033244					
Standard Error	2.393851					
Observations	28					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	0.752337	0.752337	0.131286	0.720031	
Residual	26	148.993559	5.730522			
Total	27	149.745896				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.417051	0.774083	21.208386	0.000000	14.825901	18.008202
Dividend Growth Rate	5.139168	14.183503	0.362334	0.720031	-24.015441	34.293776

SUMMARY OUTPUT

X = 5-year Historical BPS Growth  
Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.080520					
R Square	0.006483					
Adjusted R Square	-0.027776					
Standard Error	2.294913					
Observations	31					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	0.996692	0.996692	0.189247	0.666765	
Residual	29	152.732205	5.266628			
Total	30	153.728897				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.332177	0.799749	20.421833	0.000000	14.896507	17.967847
Book Value Growth Rate	6.182274	14.211306	0.435025	0.666765	-22.883112	35.247659

SUMMARY OUTPUT

X = 5-year Historical EPS Growth  
Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.254464					
R Square	0.064752					
Adjusted R Square	0.034583					
Standard Error	2.165158					
Observations	33					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	10.061628	10.061628	2.146294	0.152984	
Residual	31	145.325123	4.687907			
Total	32	155.386752				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.853890	0.406168	41.494876	0.000000	16.025505	17.682275
EPS Growth Rate	-8.660808	5.911719	-1.465024	0.152984	-20.717839	3.396222

SUMMARY OUTPUT

X = Value Line Projected DPS Growth

Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.033679					
R Square	0.001134					
Adjusted R Square	-0.033309					
Standard Error	2.245781					
Observations	31					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	0.166093	0.166093	0.032932	0.857260	
Residual	29	146.282462	5.043533			
Total	30	146.428555				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	16.626386	0.588668	28.244073	0.000000	15.422424	17.830347
Dividend Growth Rate	1.841251	10.146240	0.181471	0.857260	-18.910140	22.592642

SUMMARY OUTPUT

X = Value Line Projected BPS Growth

Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.274459					
R Square	0.075328					
Adjusted R Square	0.045499					
Standard Error	2.152881					
Observations	33					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	11.704912	11.704912	2.525387	0.122176	
Residual	31	143.881839	4.634898			
Total	32	155.386752				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	19.082039	1.586555	12.027345	0.000000	15.846240	22.317839
Book Value Growth Rate	-59.665899	37.545872	-1.589147	0.122176	-136.241209	16.909412

SUMMARY OUTPUT

X = Value Line Projected EPS Growth

Y = Current P/E Ratio

Regression Statistics						
Multiple R	0.490188					
R Square	0.240284					
Adjusted R Square	0.214960					
Standard Error	1.930544					
Observations	32					

ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	35.363442	35.363442	9.488442	0.004399	
Residual	30	111.810055	3.727002			
Total	31	147.173497				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	15.369556	0.555662	27.659911	0.000000	14.234743	16.504368
EPS Growth Rate	26.764223	8.688747	3.080332	0.004399	9.018433	44.509012



## O'Donnell Projected EPS Growth Rates

Company	Ticker	Remove Negative Values			
		Schwab		Value Line	
		As shown	Corrected	As shown	Corrected
Allete	ALE	6.00%	6.00%	7.00%	7.00%
Alliant Energy	LNT	6.20%	6.20%	5.00%	5.00%
American Electric Power	AEP	3.80%	3.80%	4.50%	4.50%
Black Hills	BKH	6.00%	6.00%	11.50%	11.50%
Centerpoint Energy	CNP	4.80%	4.80%	4.50%	4.50%
Cleco Corp.	CNL	8.00%	8.00%	5.50%	5.50%
CMS Energy	CMS	5.90%	5.90%	5.50%	5.50%
Consol. Edison	ED	2.30%	2.30%	2.50%	2.50%
DTE Energy	DTE	4.60%	4.60%	4.00%	4.00%
Dominion	D	6.80%	6.80%	6.00%	6.00%
Edison International	EIX	1.20%	1.20%	2.50%	2.50%
El Paso Electric	EE	NA		3.00%	3.00%
Exelon Corp.	EXC	-0.90%		-2.50%	
FirstEnergy	FE	3.50%	3.50%	3.50%	3.50%
Hawaiian Electric	HE	3.70%	3.70%	5.50%	5.50%
IDACORP, Inc.	IDA	NA		2.00%	2.00%
Integrus Energy	TEG	5.50%	5.50%	3.50%	3.50%
MGE Energy	MGEE	NA		4.50%	4.50%
Northeast Utilities	NU	6.90%	6.90%	8.00%	8.00%
NV Energy	NVE	3.80%	3.80%	8.00%	8.00%
Otter Tail Power	OTTR	6.00%	6.00%	21.50%	24.00%
PEPCO	POM	4.80%	4.80%	6.00%	6.00%
PG&E Corp.	PCG	3.70%	3.70%	4.00%	4.00%
PPL Corporation	PPL	6.00%	6.00%	nil	
Pinnacle West	PNW	6.00%	6.00%	5.00%	5.00%
Portland General	POR	5.80%	5.80%	3.50%	3.50%
Public Serv. Enterprise	PEG	0.30%	0.30%	-2.50%	
SEMPRA Energy	SRE	5.00%	5.00%	4.50%	4.50%
TECO	TE	3.00%	3.00%	3.50%	3.50%
UIL Holdings	UIL	7.10%	7.10%	4.00%	4.00%
Vectren Corp.	VVC	5.00%	5.00%	6.50%	6.50%
Westar Energy	WR	4.80%	4.80%	6.00%	6.00%
Xcel Energy	XEL	5.50%	5.50%	4.50%	4.50%
Mean:		4.70%	4.90%	5.02%	5.60%

Source: Exhibit KWO-1

[illegible]

Company		Retention Ratio and Earnings Growth																
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
FinEnergy Corp.	Earnings per Share [1]	1.94	1.95	2.69	2.84	2.54	1.47	2.84	3.82	4.72	4.38	3.32	3.25	1.88	2.13			
	Dividends per Share [2]	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.91	1.85	2.05	2.20	2.20	1.50	1.82			
	Payout Ratio [3]	77.32%	76.92%	55.76%	52.82%	59.06%	102.04%	68.95%	60.21%	48.43%	48.59%	50.23%	66.27%	67.69%	117.02%			
	Earnings Growth [4]	N/A	6.77%	7.60%	18.76%	-10.56%	-27.93%	88.44%	2.53%	34.51%	10.47%	3.79%	-24.20%	-2.11%	-42.30%			
	Average Earnings Growth [5]	N/A	6.77%	8.77%	14.56%	-18.76%	-27.93%	42.95%	5.42%	4.49%	-10.84%	-10.27%	N/A	N/A	N/A			
Hawaiian Electric Indu	Earnings per Share [1]	1.30	1.48	1.27	1.60	1.62	1.58	1.35	1.46	1.33	1.11	1.07	0.91	1.21	1.44			
	Dividends per Share [2]	1.22	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24			
	Payout Ratio [3]	93.08%	88.41%	93.78%	77.50%	76.54%	78.48%	91.18%	84.93%	93.23%	111.71%	115.89%	136.26%	102.48%	86.11%			
	Earnings Growth [4]	6.15%	7.25%	-12.41%	25.98%	1.25%	-2.47%	-13.92%	7.35%	-8.90%	-16.54%	-3.60%	-14.95%	32.97%	16.67%			
	Average Earnings Growth [5]	4.99%	4.01%	-0.31%	3.64%	-3.34%	-5.90%	-7.12%	-7.33%	-2.21%	3.38%	10.02%	N/A	N/A	N/A			
IDACORP, Inc.	Earnings per Share [1]	2.32	2.37	2.43	3.50	3.35	0.96	1.90	1.75	2.35	1.86	2.18	2.64	2.95	3.36			
	Dividends per Share [2]	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86			
	Payout Ratio [3]	80.17%	78.48%	76.54%	53.14%	55.52%	177.08%	63.16%	68.57%	51.06%	64.52%	55.05%	45.45%	40.69%	40.65%			
	Earnings Growth [4]	N/A	4.99%	2.16%	44.03%	-4.23%	-51.34%	-41.10%	97.92%	-7.89%	34.29%	-20.85%	17.20%	11.74%	13.90%			
	Average Earnings Growth [5]	9.88%	-1.38%	-10.03%	6.37%	6.37%	12.47%	44.13%	8.77%	12.70%	8.62%	12.85%	N/A	N/A	N/A			
Integrus Energy	Earnings per Share [1]	N/A	N/A	N/A	N/A	N/A	2.74	2.76	4.07	4.09	3.51	2.28	3.24	2.88	3.67			
	Dividends per Share [2]	N/A	N/A	N/A	N/A	N/A	2.12	2.16	2.20	2.24	2.28	2.56	2.68	2.72	2.72			
	Payout Ratio [3]	N/A	N/A	N/A	77.37%	78.26%	54.05%	54.77%	64.96%	103.23%	169.62%	119.30%	83.95%	94.44%	74.11%			
	Earnings Growth [4]	N/A	N/A	N/A	0.73%	47.46%	0.49%	-14.18%	-29.34%	-36.29%	-41.30%	-42.11%	-11.11%	-11.41%	27.43%			
	Average Earnings Growth [5]	N/A	N/A	N/A	1.03%	-6.37%	-7.00%	1.32%	1.93%	13.29%	N/A	N/A	N/A	N/A	N/A			
MGE Energy	Earnings per Share [1]	0.62	1.40	1.38	1.48	1.67	1.62	1.69	1.71	1.77	1.57	2.06	2.27	2.38	2.21			
	Dividends per Share [2]	1.29	1.30	1.32	1.32	1.34	1.35	1.36	1.37	1.39	1.41	1.43	1.46	1.49	1.52			
	Payout Ratio [3]	156.10%	92.14%	94.20%	82.10%	79.28%	78.95%	76.84%	87.26%	67.48%	62.11%	60.08%	66.06%	59.60%	57.58%			
	Earnings Growth [4]	N/A	70.73%	-1.43%	12.84%	-2.96%	4.32%	1.18%	-11.30%	31.21%	10.19%	4.85%	-7.14%	13.12%	5.60%			
	Average Earnings Growth [5]	17.26%	4.52%	-0.01%	5.78%	6.96%	7.69%	5.59%	5.32%	5.32%	4.42%	N/A	N/A	N/A	N/A			
Northeast Utilities	Earnings per Share [1]	0.01	N/A	N/A	1.37	1.06	1.24	0.91	0.98	0.82	1.59	1.86	1.91	2.10	2.22			
	Dividends per Share [2]	0.25	N/A	0.40	0.45	0.53	0.58	0.63	0.68	0.73	0.78	0.83	0.95	1.03	1.10			
	Payout Ratio [3]	13800.00%	N/A	N/A	32.85%	49.07%	46.77%	68.23%	68.39%	89.02%	49.06%	44.62%	49.74%	49.05%	49.55%			
	Earnings Growth [4]	N/A	N/A	N/A	N/A	N/A	-21.17%	14.81%	17.69%	-16.33%	93.90%	16.98%	2.69%	9.95%	5.71%			
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	14.89%	15.13%	20.49%	21.44%	25.85%	4.09%	N/A	N/A	N/A			
NV Energy Inc.	Earnings per Share [1]	1.56	1.64	0.83	N/A	N/A	0.34	N/A	0.44	1.14	0.89	0.89	0.78	0.96	0.89			
	Dividends per Share [2]	1.60	1.45	1.17	1.00	0.40	0.20	N/A	N/A	N/A	0.16	0.34	0.41	0.45	0.49			
	Payout Ratio [3]	102.56%	88.41%	140.96%	N/A	N/A	N/A	N/A	N/A	N/A	17.99%	38.20%	52.56%	46.88%	47.41%			
	Earnings Growth [4]	N/A	5.77%	-0.61%	N/A	N/A	N/A	N/A	N/A	10.00%	159.09%	-21.93%	0.00%	-12.36%	23.08%			
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	N/A	26.96%	29.59%	-7.87%	15.65%	N/A	N/A	N/A	N/A			
Otter Tail Corp.	Earnings per Share [1]	1.24	1.29	1.29	1.45	1.50	1.68	1.79	1.51	1.12	1.16	1.09	1.19	1.38	1.05			
	Dividends per Share [2]	0.90	0.93	0.96	1.02	1.04	1.06	1.10	1.10	1.12	1.15	1.17	1.19	1.19	1.19			
	Payout Ratio [3]	72.59%	72.09%	68.28%	63.75%	61.90%	59.22%	71.52%	73.33%	65.92%	68.05%	67.73%	109.17%	167.61%	264.44%			
	Earnings Growth [4]	N/A	4.03%	0.00%	10.34%	5.00%	6.55%	-15.64%	-0.66%	18.67%	-5.06%	5.33%	-38.76%	-34.86%	-46.48%			
	Average Earnings Growth [5]	6.36%	6.85%	3.73%	2.78%	0.77%	0.53%	-1.35%	-10.94%	-23.97%	-19.27%	6.33%	N/A	N/A	N/A			
Pepco Holdings	Earnings per Share [1]	N/A	N/A	N/A	N/A	N/A	1.00	1.00	1.46	1.49	1.33	1.53	1.33	1.06	1.24			
	Dividends per Share [2]	N/A	N/A	N/A	N/A	N/A	0.74	0.77	0.84	0.77	0.78	0.78	0.78	0.78	0.78			
	Payout Ratio [3]	N/A	N/A	N/A	N/A	N/A	74.07%	74.07%	68.49%	67.11%	78.20%	67.97%	55.96%	101.86%	87.10%			
	Earnings Growth [4]	N/A	N/A	N/A	N/A	N/A	8.15%	2.05%	-10.74%	15.04%	-10.47%	26.14%	-46.08%	16.96%	-8.05%			
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	8.13%	-2.52%	0.47%	1.00%	-0.25%	N/A	N/A	N/A	N/A			
PG&E Corp.	Earnings per Share [1]	2.16	1.57	1.88	3.02	N/A	2.05	N/A	2.12	2.35	2.76	2.18	3.22	3.03	2.82			
	Dividends per Share [2]	1.77	1.20	1.20	1.20	N/A	N/A	N/A	N/A	N/A	1.23	1.44	1.56	1.82	1.82			
	Payout Ratio [3]	81.94%	63.83%	53.57%	N/A	N/A	N/A	N/A	N/A	52.34%	67.45%	51.60%	48.49%	64.54%	65.47%			
	Earnings Growth [4]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.85%	17.45%	0.72%	15.53%	-3.93%	-4.42%			
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	9.65%	4.23%	7.79%	4.23%	0.46%	-4.78%	N/A	N/A	N/A			
PPL Corp.	Earnings per Share [1]	0.99	1.12	1.01	1.64	1.79	1.54	1.84	1.92	2.29	2.63	2.45	1.98	2.28	2.51			
	Dividends per Share [2]	0.84	0.67	0.50	0.53	0.72	0.72	0.77	0.82	0.96	1.10	1.22	1.34	1.38	1.40			
	Payout Ratio [3]	N/A	84.85%	49.50%	32.32%	28.61%	46.75%	41.85%	43.85%	50.00%	48.03%	45.33%	54.69%	115.97%	61.14%			
	Earnings Growth [4]	N/A	N/A	-8.82%	6.38%	9.15%	-13.97%	19.48%	1.50%	2.67%	19.27%	-14.28%	-5.84%	-51.43%	92.44%			
	Average Earnings Growth [5]	N/A	N/A	13.44%	3.79%	5.82%	11.58%	6.32%	-4.30%	13.68%	12.66%	9.63%	N/A	N/A	N/A			
Pinnacle West Capital	Earnings per Share [1]	2.47	2.76	2.85	3.18	3.35	3.68	2.53	2.52	2.88	2.24	2.03	2.26	3.08	2.99			
	Dividends per Share [2]	1.03	1.13	1.33	1.43	1.43	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63			
	Payout Ratio [3]	41.70%	40.94%	42.69%	41.58%	41.58%	41.58%	64.43%	68.65%	70.38%	86.16%	64.04%	70.95%	90.06%	92.92%			
	Earnings Growth [4]	N/A	11.74%	3.26%	11.58%	5.35%	9.85%	-31.25%	-0.40%	2.36%	-15.18%	4.04%	-5.62%	-28.38%	6.60%			
	Average Earnings Growth [5]	8.36%	-0.24%	-0.97%	-6.52%	-0.16%	4.74%	-0.86%	-0.01%	3.89%	0.98%	5.73%	N/A	N/A	N/A			
Portland General Elec	Earnings per Share [1]	N/A	N/A	N/A	N/A	N/A	0.68	0.83	0.97	1.01	1.14	1.31	1.66	1.95	1.87			
	Dividends per Share [2]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	Payout Ratio [3]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	Earnings Growth [4]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Retention Ratio and Earnings Growth

Company	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Public Service Enterprise Group		1.21	1.40	1.56	1.78	1.85	1.88	1.88	1.52	1.79	1.85	2.59	2.90	3.08	3.07	3.11	2.44
	Dividends per Share [1]		1.08	1.08	1.08	1.08	1.08	1.08	1.10	1.12	1.14	1.14	1.17	1.29	1.33	1.37	1.42
	Payout Ratio [3]	N/A	89.26%	69.23%	60.67%	58.38%	57.45%	57.45%	72.37%	62.57%	61.62%	45.17%	44.48%	44.18%	44.63%	44.05%	58.20%
	Earnings Growth [4]	N/A	N/A	11.43%	14.10%	3.93%	1.62%	0.00%	-19.15%	17.76%	3.35%	40.00%	11.97%	6.21%	-0.32%	1.30%	-21.54%
	Average Earnings Growth [5]	N/A	9.36%	0.10%	0.83%	0.72%	8.39%	10.79%	15.86%	12.24%	11.83%	-0.48%	N/A	N/A	N/A	N/A	N/A
Sempra Energy		1.99	2.20	1.24	1.66	2.06	2.55	3.01	3.93	3.52	4.23	4.26	4.43	4.78	4.02	4.47	4.35
	Dividends per Share [1]		1.56	1.56	1.56	1.00	1.00	1.00	1.00	1.16	1.20	1.24	1.37	1.56	1.56	1.92	2.40
	Payout Ratio [3]	78.79%	125.81%	93.99%	48.54%	38.22%	35.84%	33.22%	25.45%	32.95%	28.37%	29.11%	30.93%	32.64%	38.81%	42.95%	55.17%
	Earnings Growth [4]	N/A	11.11%	33.87%	24.10%	23.79%	9.41%	7.89%	30.56%	-10.43%	20.17%	0.71%	3.99%	7.90%	-15.90%	11.19%	-2.68%
	Average Earnings Growth [5]	9.85%	9.51%	19.81%	19.15%	12.24%	11.52%	9.78%	4.47%	3.37%	1.58%	0.90%	N/A	N/A	N/A	N/A	N/A
TECO Energy, Inc.		1.71	1.52	1.53	1.97	2.24	1.95	N/A	0.71	1.00	1.17	1.27	0.77	1.00	1.13	1.27	1.14
	Dividends per Share [1]		1.23	1.29	1.33	1.37	1.41	0.93	0.76	0.76	0.76	0.78	0.80	0.80	0.82	0.85	0.88
	Payout Ratio [3]	64.91%	80.92%	84.31%	67.51%	61.16%	72.31%	N/A	107.04%	76.00%	64.96%	61.42%	103.90%	80.00%	72.57%	66.93%	77.19%
	Earnings Growth [4]	N/A	-5.59%	0.65%	28.76%	13.71%	-12.95%	N/A	N/A	40.85%	17.00%	8.55%	-39.37%	29.87%	13.00%	12.39%	-10.24%
	Average Earnings Growth [5]	6.24%	4.92%	N/A	N/A	N/A	N/A	N/A	11.38%	5.81%	4.89%	1.13%	N/A	N/A	N/A	N/A	N/A
UIL Holdings		1.90	1.80	1.73	2.23	2.56	2.53	1.85	1.24	1.30	1.86	1.87	1.89	1.94	1.99	1.95	2.02
	Dividends per Share [1]		1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
	Payout Ratio [3]	91.05%	96.11%	77.59%	77.59%	67.59%	68.38%	93.51%	112.34%	133.08%	93.01%	92.51%	91.53%	89.18%	86.93%	88.72%	85.64%
	Earnings Growth [4]	N/A	-8.16%	23.89%	14.80%	-1.17%	-26.88%	-32.87%	24.19%	-15.58%	43.08%	0.54%	1.07%	2.65%	2.58%	-2.01%	3.59%
	Average Earnings Growth [5]	6.50%	0.49%	-4.47%	-4.41%	-10.48%	-1.63%	3.85%	6.35%	9.98%	0.96%	1.57%	N/A	N/A	N/A	N/A	N/A
Vectren Corporation								1.88	1.56	1.42	1.44	1.83	1.63	1.79	1.64	1.73	1.94
	Dividends per Share [1]							1.07	1.11	1.15	1.19	1.23	1.27	1.31	1.35	1.39	1.41
	Payout Ratio [3]	N/A	N/A	N/A	N/A	N/A	N/A	63.89%	71.15%	80.99%	85.42%	69.40%	80.37%	75.42%	83.54%	80.35%	72.68%
	Earnings Growth [4]	N/A	N/A	N/A	N/A	N/A	N/A	-7.14%	-8.97%	27.46%	-20.44%	27.08%	-10.93%	9.82%	-8.38%	5.49%	12.14%
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	N/A	2.84%	6.60%	-0.57%	4.62%	1.63%	N/A	N/A	N/A	N/A	N/A
Westar Energy, Inc.		2.60	2.13	1.48	1.48	0.89	N/A	1.00	1.48	1.17	1.55	1.88	1.84	1.31	1.28	1.80	2.15
	Dividends per Share [1]		2.10	2.14	2.14	1.44	1.20	1.20	0.87	0.80	0.92	0.98	1.08	1.16	1.20	1.24	1.32
	Payout Ratio [3]	79.62%	N/A	144.59%	144.59%	161.80%	N/A	120.00%	58.78%	68.38%	59.35%	52.13%	58.70%	88.55%	93.75%	71.51%	61.40%
	Earnings Growth [4]	N/A	N/A	-30.52%	-30.52%	-38.86%	N/A	48.00%	-20.95%	32.49%	21.29%	-2.13%	-28.80%	-2.29%	40.63%	-0.56%	20.11%
	Average Earnings Growth [5]	N/A	N/A	N/A	N/A	N/A	N/A	15.74%	4.11%	5.74%	1.37%	5.82%	N/A	N/A	N/A	N/A	N/A
Xcel Energy Inc.		1.91	1.61	1.43	1.43	1.60	2.27	0.42	1.23	1.27	1.20	1.35	1.46	1.49	1.56	1.72	1.85
	Dividends per Share [1]		1.40	1.43	1.45	1.48	1.50	1.13	0.81	0.85	0.85	0.88	0.91	0.97	1.00	1.03	1.07
	Payout Ratio [3]	71.73%	86.98%	101.40%	101.40%	92.50%	66.08%	269.05%	63.78%	70.83%	65.19%	67.41%	64.38%	65.10%	64.10%	59.88%	57.84%
	Earnings Growth [4]	N/A	-15.71%	14.29%	11.89%	11.89%	41.88%	-81.50%	192.86%	-5.51%	12.50%	0.00%	8.15%	2.05%	4.70%	10.26%	7.56%
	Average Earnings Growth [5]	6.01%	-7.15%	28.57%	33.67%	30.19%	24.32%	40.62%	3.44%	5.48%	5.03%	6.54%	N/A	N/A	N/A	N/A	N/A

Notes:

[1] Source: Value Line, negative earnings have been excluded (shown as N/A).

[2] Source: Value Line

[3] Equals [2]/[1]

[4] Equals [1]-[1]/[1]

[5] Equals Average of [4], [4b], [4c], [4d]



ROE Component Analysis - DuPont Formula

	Common					Reported					Calculated					Common	
	Year	Profit Margin	Asset Turnover	Equity Multiplier	Return on Equity	Year	Total Capital	Equity Ratio	Value per Share	Shares Outstanding	Return on Equity	Profit Margin	Asset Turnover	Equity Multiplier	Return on Equity	Equity Check	ROE Check
ALE	2001	5.93%	1.05	2.55	15.28%	2001	1,020.70	61.80%	21.23	29.70	6.10%	5.12%	85.09%	140.00%	6.10%	99.96%	100.09%
	2002	5.68%	0.82	2.92	9.50%	2002	990.60	60.90%	20.03	30.10	11.30%	9.22%	85.09%	142.62%	11.27%	99.94%	100.09%
	2003	6.40%	0.74	2.74	11.24%	2003	1,025.60	64.90%	21.90	30.40	11.60%	10.08%	83.24%	136.46%	11.81%	100.02%	100.11%
	2004	6.88%	0.76	2.34	10.51%	2004	1,153.50	64.40%	24.11	30.80	11.80%	10.41%	76.21%	148.68%	11.79%	100.08%	100.11%
	2005	6.63%	0.82	2.26	10.63%	2005	1,387.30	58.40%	25.37	32.60	10.00%	10.30%	51.74%	197.85%	8.55%	100.08%	99.81%
	2006	7.18%	0.75	2.29	11.35%	2006	1,625.30	57.20%	26.41	35.20	9.50%	10.30%	67.04%	181.55%	8.55%	100.08%	99.81%
	2007	8.15%	0.72	2.25	11.86%	2007	1,741.60	55.80%	27.26	37.50	8.70%	10.11%	50.23%	185.16%	7.72%	100.08%	100.28%
	2008	7.01%	0.70	2.35	10.82%	2008	1,987.20	55.70%	28.16	37.50	8.70%	10.11%	46.81%	183.75%	8.69%	100.02%	99.92%
	2009	7.59%	0.59	2.35	9.90%	2009	2,347.60	55.70%	31.48	39.40	8.10%	10.10%	40.84%	195.34%	8.08%	99.93%	99.75%
	2010	8.55%	0.52	2.39	9.78%	2010	2,104.60	55.80%	31.48	39.40	8.10%	10.10%	40.84%	195.34%	8.08%	99.93%	99.75%
	2011	8.72%	0.51	2.39	10.08%	2011	2,104.60	55.80%	31.48	39.40	8.10%	10.10%	40.84%	195.34%	8.08%	99.93%	99.75%
5-yr Projection	9.73%	0.46	2.37	9.68%	5-yr Projection	2,060.00	58.50%	35.50	45.00	9.50%	12.55%	39.53%	198.80%	9.77%	100.27%	102.82%	
2010-2012	8.84%	0.50	2.40	9.90%	2010-2012	2,060.00	58.50%	35.50	45.00	9.50%	12.55%	39.53%	198.80%	9.77%	100.27%	102.82%	
5-yr Projection Difference	9.73%	0.46	2.37	9.86%	5-yr Projection Difference	0.06%	(0.04)	(0.03)	-0.04%	(0.03)	-0.04%	(0.03)	(0.03)	(0.03)	-0.04%	(0.03)	(0.03)
LMT	2000	38.50	751.40	883.10	20.00	2000	3,119.30	4.06%	25.79	79.01	9.60%	8.44%	64.66%	182.42%	9.60%	99.94%	103.77%
	2001	88.00	737.40	860.40	20.00	2001	3,682.80	42.70%	21.39	89.68	9.80%	7.02%	71.90%	201.47%	10.17%	100.05%	103.73%
	2002	77.30	767.10	921.60	20.00	2002	3,729.20	39.20%	19.89	92.30	9.80%	4.34%	69.96%	203.31%	6.17%	100.09%	106.31%
	2003	176.80	841.70	1,054.50	20.00	2003	4,432.80	50.00%	21.37	110.96	7.07%	5.65%	70.57%	187.09%	7.45%	100.09%	111.25%
	2004	229.50	801.00	1,387.30	20.00	2004	5,104.70	50.20%	22.13	115.74	8.20%	7.76%	55.99%	206.22%	8.96%	99.95%	100.22%
	2005	337.80	801.00	1,625.30	20.00	2005	6,066.20	53.10%	20.85	117.04	13.10%	10.30%	67.40%	198.28%	13.83%	99.92%	105.59%
	2006	280.10	801.00	1,741.60	20.00	2006	6,216.40	62.90%	22.83	116.13	9.10%	7.74%	67.94%	186.36%	9.80%	100.07%	107.72%
	2007	320.80	801.00	1,987.20	20.00	2007	6,329.50	61.90%	24.30	110.36	11.30%	9.33%	74.45%	174.63%	11.97%	100.07%	107.72%
	2008	280.00	801.00	2,347.60	20.00	2008	6,329.50	58.60%	25.56	110.45	9.30%	7.81%	68.77%	188.71%	9.92%	100.08%	108.84%
	2009	208.60	801.00	2,686.30	20.00	2009	6,329.50	48.50%	25.07	110.88	8.90%	6.06%	68.77%	188.71%	9.92%	100.08%	108.84%
	2010	304.40	801.00	2,686.30	20.00	2010	6,329.50	50.90%	27.14	110.88	8.90%	6.06%	68.77%	188.71%	9.92%	100.08%	108.84%
2011	304.40	801.00	2,686.30	20.00	2011	6,329.50	50.90%	27.14	110.88	8.90%	6.06%	68.77%	188.71%	9.92%	100.08%	108.84%	
2012	337.80	801.00	2,686.30	20.00	2012	6,329.50	50.90%	27.14	110.88	8.90%	6.06%	68.77%	188.71%	9.92%	100.08%	108.84%	
5-yr Projection	400.00	7,860.00	9,500.00	15.30%	5-yr Projection	4,500.00	51.30%	34.50	116.00	11.00%	10.92%	39.46%	250.04%	10.78%	100.03%	99.59%	
2000	332.00	13,864.00	22,391.00	44.40%	2000	18,151.00	44.40%	25.01	322.02	3.70%	2.42%	61.15%	277.86%	4.12%	99.93%	111.34%	
2001	1,095.00	13,864.00	22,391.00	44.40%	2001	18,151.00	44.40%	25.54	322.24	13.70%	6.71%	67.12%	306.90%	13.81%	99.97%	100.83%	
2002	976.00	14,555.00	22,028.00	43.10%	2002	16,353.00	38.70%	20.85	338.84	12.80%	7.38%	61.65%	270.13%	12.30%	99.99%	100.83%	
2003	984.00	14,555.00	22,028.00	43.10%	2003	16,353.00	38.70%	19.93	338.84	12.20%	7.38%	61.65%	270.13%	12.30%	99.99%	100.80%	
2004	1,038.00	14,057.00	22,801.00	43.10%	2004	19,584.00	43.10%	21.32	395.86	12.20%	8.55%	48.87%	267.45%	11.41%	100.08%	100.87%	
2005	1,038.00	12,111.00	20,222.00	44.90%	2005	20,222.00	44.90%	23.08	383.72	11.30%	8.96%	47.13%	264.36%	12.01%	99.95%	100.09%	
2006	1,131.00	12,622.00	20,222.00	44.90%	2006	21,902.00	43.00%	23.73	386.67	12.00%	8.96%	47.13%	264.36%	12.01%	99.95%	100.09%	
2007	1,147.00	13,360.00	20,222.00	44.90%	2007	24,342.00	41.40%	25.17	400.43	11.40%	8.57%	44.79%	296.40%	11.38%	99.92%	99.91%	
2008	1,208.00	14,440.00	32,897.00	46.70%	2008	26,296.00	40.70%	26.33	406.07	11.30%	10.12%	38.28%	306.25%	11.29%	99.92%	99.91%	
2009	1,365.00	14,489.00	34,344.00	46.70%	2009	28,958.00	45.40%	27.49	478.05	9.10%	8.65%	40.44%	351.75%	10.38%	99.94%	100.63%	
2010	1,248.00	14,427.00	35,674.00	46.70%	2010	29,747.00	48.30%	30.33	483.42	10.30%	10.01%	40.44%	351.75%	10.38%	99.94%	100.63%	
2011	1,513.00	15,116.00	36,971.00	46.70%	2011	30,823.00	49.40%	31.37	483.42	10.30%	10.01%	40.44%	351.75%	10.38%	99.94%	100.63%	
2012	1,443.00	14,945.00	36,971.00	46.70%	2012	30,823.00	49.40%	31.37	483.42	10.30%	10.01%	40.44%	351.75%	10.38%	99.94%	100.63%	
5-yr Projection	1,800.00	16,550.00	47,200.00	54.30%	5-yr Projection	35,400.00	47.20%	38.25	505.00	10.00%	10.19%	38.53%	254.57%	9.48%	100.06%	97.96%	
2000	52.80	1,623.80	794.30	47.20%	2000	589.40	47.20%	11.95	23.30	19.00%	3.25%	204.43%	265.52%	18.98%	100.09%	99.89%	
2001	86.10	1,558.80	1,238.20	54.70%	2001	631.00	54.70%	18.95	26.89	17.20%	5.65%	125.68%	243.14%	17.30%	100.06%	100.58%	
2002	63.20	423.90	1,154.20	45.80%	2002	1,154.20	45.80%	19.66	26.89	15.90%	14.91%	28.71%	278.71%	11.93%	99.95%	100.27%	
2003	57.10	1,136.10	1,141.40	44.50%	2003	1,578.20	44.50%	21.72	32.30	8.10%	5.03%	98.54%	162.52%	8.13%	99.88%	100.38%	
2004	57.20	1,121.70	1,445.70	49.60%	2004	1,486.30	49.60%	22.43	32.36	7.80%	5.05%	77.59%	198.37%	7.85%	99.97%	100.63%	
2005	70.30	1,391.80	1,435.40	55.70%	2005	1,408.10	55.70%	22.29	33.16	9.40%	11.27%	38.90%	184.40%	9.52%	100.10%	100.22%	
2006	74.00	656.90	1,646.40	63.20%	2006	1,418.40	63.20%	23.68	33.37	9.40%	11.27%	38.90%	184.40%	9.37%	100.02%	99.64%	
2007	100.10	695.90	1,823.50	67.70%	2007	1,534.20	67.70%	25.66	37.80	10.30%	14.38%	38.16%	208.30%	10.32%	100.03%	99.64%	
2008	6.80	1,005.80	2,022.20	51.80%	2008	1,551.80	51.80%	27.19	38.64	8.30%	0.69%	48.74%	182.48%	0.65%	100.01%	92.47%	
2009	89.70	1,268.60	2,160.70	48.80%	2009	2,160.70	48.80%	27.84	38.67	7.07%	0.69%	48.74%	182.48%	0.65%	100.01%	92.47%	
2010	84.60	1,307.30	2,495.40	48.80%	2010	2,495.40	48.80%	28.02	39.27	5.90%	4.94%	52.38%	226.91%	5.87%	100.06%	99.70%	
2011	40.40	1,272.20	2,495.40	48.80%	2011	2,495.40	48.80%	27.53	43.92	3.30%	3.16%	45.61%	226.91%	3.34%	99.93%	99.70%	
2012	66.90	1,173.90	2,714.70	58.60%	2012	2,714.70	58.60%	27.83	44.21	7.10%	7.00%	42.80%	222.38%	7.05%	99.94%	99.24%	
5-yr Projection	135.00	1,560.00	3,750.00	48.50%	5-yr Projection	3,750.00	48.50%	33.00	45.20	9.00%	9.00%	40.00%	240.42%	8.98%	99.21%	99.77%	
2000	446.90	10,656.00	11,200.00	54.50%	2000	12,363.00	54.50%	22.24	302.94	6.60%	4.19%	95.14%	166.23%	6.63%	99.99%	100.50%	
2001	396.50	7,922.50	11,498.00	12.80%	2001	11,322.00	12.80%	4.74	300.30	27.20%	4.88%	69.44%	799.75%	27.08%	99.71%	99.55%	
2002	418.70	7,922.50	11,812.00	14.00%	2002	12,544.00	14.00%	5.75	306.30	23.80%	4.30%	82.63%	672.60%	23.90%	100.29%	100.41%	
2003	205.00	8,510.40	8,299.50	13.30%	2003	8,299.50	13.30%	3.58	308.05	18.40%	2.42%	103.96%	741.72%	18.64%	100.20%	100.20%	
2004	225.00	9,722.00	8,682.00	13.10%	2004	9,684.00	13.10%	4.18	310.33	17.00%	2.31%	114.46%	657.18%	17.41%	10		

	Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Equity	Profit Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Equity Check	ROE Check
	2008	447.00	11,322.00	10,266.00	12,218.00	16.70%	5.89	346.00	21.90%	108.97%	504.61%	21.91%	99.91%	100.03%
	2009	372.00	8,281.00	10,788.00	11,758.00	22.40%	6.74	391.75	14.10%	76.76%	469.60%	14.12%	100.25%	100.17%
	2010	442.00	8,785.00	11,732.00	12,199.00	28.20%	7.53	424.70	13.80%	74.88%	387.07%	13.83%	100.06%	100.21%
	2011	546.00	8,450.00	12,402.00	12,883.00	32.80%	9.91	426.03	12.90%	68.13%	292.95%	12.94%	100.07%	100.32%
	2012	581.00	7,452.00	13,597.00	12,658.00	34.00%	10.06	427.44	7.80%	54.81%	315.94%	13.50%	99.91%	100.00%
	5-yr Projection	700.00	8,200.00	12,400.00	12,400.00	43.50%	12.50	433.00	13.00%	8.54%	157.54%	12.98%	100.34%	99.83%
CNL	2000	68.30	820.00	1,232.80	1,139.20	39.70%	10.04	44.99	14.90%	65.52%	272.59%	15.32%	99.89%	102.84%
	2001	72.30	1,058.80	1,224.70	1,134.70	42.40%	10.69	44.96	13.80%	86.44%	254.59%	15.03%	99.90%	102.83%
	2002	74.20	1,566.20	1,468.70	1,468.70	38.20%	10.71	47.18	12.50%	46.05%	293.01%	13.41%	100.05%	102.35%
	2003	61.20	974.80	1,417.10	1,481.60	53.10%	10.59	47.18	12.50%	67.12%	297.66%	12.86%	99.99%	102.84%
	2004	96.10	945.90	1,181.60	1,315.80	53.10%	13.69	49.62	11.80%	70.36%	173.33%	12.31%	100.04%	103.41%
	2005	73.00	945.90	1,181.60	1,315.80	52.00%	13.69	49.62	10.70%	8.15%	173.72%	10.96%	100.01%	102.44%
	2006	74.80	1,009.70	1,304.90	1,515.80	57.80%	15.22	57.57	8.30%	76.69%	148.96%	8.53%	100.02%	102.74%
	2007	78.80	1,030.60	1,390.90	1,725.90	56.70%	16.85	59.94	7.80%	52.81%	170.96%	7.88%	100.04%	101.09%
	2008	102.10	1,080.20	2,045.30	2,167.70	48.90%	17.65	60.04	9.60%	58.00%	182.95%	9.53%	99.97%	100.33%
	2009	106.30	853.80	2,247.00	2,436.40	45.80%	18.50	60.26	9.50%	12.45%	201.37%	10.58%	99.90%	100.28%
	2010	139.50	1,148.70	2,784.20	2,717.90	48.50%	21.76	60.53	12.14%	41.26%	211.22%	11.11%	100.00%	99.84%
	2011	157.80	1,117.30	2,893.90	2,756.90	51.50%	23.55	80.29	11.10%	38.61%	203.82%	10.91%	100.00%	99.84%
	2012	163.60	993.70	3,009.50	2,756.50	54.40%	24.84	80.36	10.90%	16.46%	200.70%	10.91%	99.99%	100.09%
	5-yr Projection	210.00	1,375.00	3,050.00	3,050.00	62.50%	31.75	60.50	11.00%	48.67%	148.20%	11.02%	100.77%	100.15%
CMS	2000	287.00	8,998.00	7,835.00	10,318.00	22.90%	19.48	121.20	12.10%	114.84%	331.00%	12.15%	99.92%	100.38%
	2001	169.00	9,597.00	8,362.00	10,131.00	18.70%	14.21	132.99	8.80%	117.51%	254.59%	8.92%	99.75%	101.37%
	2002	(414.00)	6,897.00	5,234.00	7,532.00	15.00%	7.86	144.10	N/A	185.07%	463.27%	-36.64%	100.25%	NA
	2003	(40.00)	5,513.00	6,944.00	8,652.00	18.30%	8.84	195.00	0.73%	79.39%	438.57%	-2.53%	100.14%	NA
	2004	144.00	5,472.00	9,640.00	9,640.00	21.30%	10.53	220.50	6.20%	63.36%	416.67%	6.95%	100.01%	107.59%
	2005	158.00	6,288.00	7,843.00	8,481.00	24.80%	10.53	220.50	9.90%	80.15%	338.20%	10.85%	100.10%	107.59%
	2006	168.00	6,820.00	8,161.00	8,161.00	24.80%	10.53	220.50	6.40%	85.38%	357.46%	7.08%	100.14%	106.64%
	2007	390.00	6,821.00	8,161.00	8,161.00	25.80%	8.46	225.15	7.20%	74.69%	410.36%	7.90%	100.14%	108.71%
	2008	231.00	6,205.00	9,982.00	8,977.00	27.40%	10.88	227.88	11.70%	4.40%	372.96%	12.17%	99.97%	104.06%
	2009	358.00	6,432.00	10,060.00	9,473.00	29.50%	11.19	249.60	8.50%	64.09%	371.91%	8.87%	99.97%	104.38%
	2010	394.00	6,503.00	10,633.00	9,279.00	32.80%	11.92	254.10	12.50%	63.88%	380.31%	12.74%	99.95%	101.91%
	2011	413.00	6,312.00	10,101.00	10,101.00	31.80%	12.09	264.10	12.90%	61.16%	381.88%	12.84%	100.13%	100.75%
	2012	413.00	7,400.00	11,600.00	11,600.00	38.00%	16.00	274.00	13.00%	54.64%	349.36%	12.84%	100.03%	100.30%
	5-yr Projection	575.00	7,400.00	11,600.00	11,600.00	38.00%	16.00	274.00	13.00%	48.05%	349.36%	13.04%	99.46%	100.34%
ED	2000	596.40	9,431.40	11,683.00	11,137.00	49.10%	25.81	212.03	10.70%	79.30%	217.49%	10.91%	100.08%	101.83%
	2001	895.80	9,634.00	11,248.00	11,417.00	49.60%	26.71	212.15	12.00%	85.65%	217.49%	10.91%	100.07%	102.39%
	2002	862.10	8,481.80	13,329.00	12,302.00	48.10%	27.68	213.93	11.30%	8.04%	235.59%	11.53%	100.07%	102.01%
	2003	639.00	9,827.00	15,225.00	13,380.00	48.00%	28.44	235.84	7.80%	63.55%	237.26%	9.96%	100.08%	101.81%
	2004	580.00	9,758.00	16,105.00	13,828.00	51.00%	29.80	245.29	7.80%	60.59%	238.38%	9.96%	100.03%	101.80%
	2005	719.00	11,690.00	17,112.00	16,451.00	48.50%	31.09	245.29	9.20%	61.17%	234.05%	9.83%	99.98%	101.38%
	2006	749.00	12,137.00	18,443.00	18,443.00	53.10%	32.58	272.02	10.40%	65.80%	230.28%	9.35%	99.93%	101.84%
	2007	836.00	13,030.00	19,841.00	19,841.00	50.60%	35.43	272.02	9.50%	65.88%	224.74%	10.56%	100.02%	101.57%
	2008	853.00	13,030.00	20,874.00	20,874.00	50.40%	36.46	281.12	8.40%	65.07%	215.31%	9.62%	100.03%	101.30%
	2009	853.00	13,030.00	20,874.00	20,874.00	50.40%	37.93	291.62	8.90%	6.66%	219.24%	8.47%	100.03%	100.85%
	2010	892.00	13,325.00	23,863.00	21,952.00	52.50%	37.93	291.62	8.90%	55.84%	215.69%	8.97%	99.98%	100.74%
	2011	1,062.00	12,938.00	25,093.00	21,784.00	52.50%	39.05	292.89	9.20%	8.21%	219.31%	9.28%	99.98%	100.89%
	2012	1,141.00	12,188.00	26,936.00	21,933.00	54.10%	40.53	292.87	9.80%	9.36%	227.03%	9.62%	100.04%	100.17%
	5-yr Projection	1,280.00	14,250.00	33,300.00	26,300.00	53.00%	47.75	293.00	9.80%	8.89%	238.90%	9.16%	100.37%	102.03%
D	2000	624.00	9,260.00	17,897.00	17,897.00	38.90%	14.22	491.60	8.00%	62.36%	212.22%	8.82%	99.91%	111.48%
	2001	775.00	10,558.00	18,681.00	22,003.00	38.00%	15.81	529.40	9.00%	56.52%	223.43%	9.27%	100.06%	102.89%
	2002	1,378.00	10,218.00	20,257.00	23,827.00	42.70%	16.57	616.20	13.30%	50.44%	266.27%	13.46%	99.04%	101.41%
	2003	1,261.00	12,078.00	25,850.00	26,571.00	42.70%	16.21	650.00	11.80%	52.30%	266.27%	12.85%	99.88%	101.31%
	2004	1,425.00	13,873.00	28,716.00	27,180.00	42.00%	16.80	680.00	6.30%	52.30%	273.94%	10.16%	100.04%	101.45%
	2005	1,050.00	18,041.00	28,940.00	25,307.00	41.10%	16.80	680.00	6.30%	52.30%	273.94%	10.16%	100.04%	101.45%
	2006	1,704.00	16,481.00	29,382.00	25,307.00	43.20%	16.80	680.00	6.30%	52.30%	273.94%	10.16%	99.95%	101.97%
	2007	1,414.00	15,674.00	29,382.00	25,307.00	39.60%	16.31	576.80	13.10%	55.09%	227.45%	13.19%	99.96%	100.89%
	2008	1,761.00	16,280.00	31,534.00	26,823.00	41.50%	17.28	593.20	14.90%	69.99%	231.23%	15.02%	99.96%	100.84%
	2009	1,553.00	15,111.00	29,661.00	26,823.00	41.50%	18.67	599.00	14.00%	59.12%	229.05%	14.19%	100.12%	101.11%
	2010	1,725.00	15,111.00	29,661.00	26,823.00	42.80%	20.65	599.00	14.00%	10.48%	229.05%	14.19%	100.09%	101.33%
	2011	1,603.00	15,187.00	29,673.00	29,097.00	39.30%	20.08	570.00	13.90%	56.89%	222.81%	14.38%	100.07%	101.27%
	2012	1,594.00	13,953.00	30,773.00	27,676.00	38.20%	25.50	576.00	14.90%	48.46%	259.46%	14.02%	100.06%	100.85%
	5-yr Projection	2,455.00	15,550.00	41,300.00	38,700.00	41.50%	25.50	600.00	16.00%	37.65%	271.17%	16.12%	99.98%	101.19%

	Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Equity	Profit Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Check	ROE
DTE	2000	468.00	5,597.00	8,077.00	49.70%	28.15	142.65	11.70%	4.18%	75.71%	184.02%	7.16%	100.03%	99.84%
	2001	329.00	7,948.00	12,517.00	36.70%	27.48	161.13	7.20%	4.19%	82.25%	207.74%	7.16%	99.90%	99.47%
	2002	632.00	6,748.00	12,350.00	37.00%	28.26	167.46	13.90%	9.36%	68.78%	214.75%	13.83%	99.80%	100.22%
	2003	480.00	7,041.00	12,956.00	40.80%	31.36	168.61	9.10%	6.82%	68.20%	195.31%	9.09%	100.03%	99.79%
	2004	443.00	7,114.00	13,154.00	42.20%	31.85	174.21	8.00%	6.23%	67.81%	188.99%	7.98%	99.86%	99.76%
	2005	576.00	9,022.00	10,830.00	44.90%	32.44	177.81	10.00%	6.38%	83.31%	187.72%	9.98%	99.96%	99.84%
	2006	437.00	9,022.00	13,323.00	43.90%	33.02	177.14	7.50%	4.84%	78.79%	185.77%	7.47%	100.01%	99.62%
	2007	453.00	8,861.00	12,824.00	45.80%	35.86	163.23	7.70%	5.11%	77.67%	185.08%	7.75%	100.01%	99.62%
	2008	445.00	9,329.00	13,766.00	43.80%	36.77	163.02	7.40%	4.77%	76.27%	185.08%	7.43%	100.09%	100.41%
	2009	532.00	8,014.00	12,431.00	46.00%	37.89	165.40	8.50%	7.98%	64.47%	204.23%	7.43%	100.06%	100.47%
	2010	630.00	8,557.00	13,811.00	48.70%	38.97	169.43	9.90%	9.34%	63.96%	186.01%	7.58%	99.83%	99.65%
	2011	624.00	8,897.00	14,196.00	48.00%	40.78	169.25	8.90%	7.01%	63.96%	186.01%	8.07%	99.84%	99.88%
	2012	668.00	8,791.00	14,864.00	51.20%	42.78	172.35	8.90%	7.58%	59.87%	189.34%	9.04%	100.08%	100.46%
5-yr Projection	930.00	10,900.00	20,100.00	50.00%	53.00	180.00	8.00%	6.53%	59.88%	181.09%	9.25%	100.08%	102.82%	
EIX	2000	(1,982.00)	11,717.00	16,090.00	15.00%	7.43	325.81	NMf	-16.92%	149.65%	324.17%	-82.17%	100.36%	NA
	2001	536.10	11,436.00	17,279.00	18.80%	10.04	325.81	13.60%	4.89%	142.72%	245.37%	16.42%	100.17%	120.71%
	2002	644.00	11,468.00	17,352.00	25.80%	13.63	325.81	11.90%	5.61%	139.30%	185.65%	14.50%	99.97%	121.83%
	2003	738.00	12,135.00	17,299.00	31.10%	16.52	325.81	13.60%	6.08%	96.41%	233.96%	13.72%	100.04%	100.86%
	2004	220.00	10,160.00	15,995.00	37.80%	18.57	325.81	3.50%	2.16%	75.09%	222.87%	3.64%	100.07%	102.51%
	2005	1,132.00	11,852.00	14,660.00	40.90%	20.30	325.81	16.70%	8.95%	81.91%	218.82%	17.12%	100.02%	103.96%
	2006	1,134.00	12,622.00	15,913.00	43.50%	23.66	325.81	14.00%	8.98%	78.32%	206.38%	14.71%	99.98%	103.75%
	2007	1,151.00	13,113.00	17,725.00	46.00%	25.92	325.81	13.00%	8.78%	75.35%	205.88%	13.92%	99.91%	104.75%
	2008	1,266.00	14,112.00	18,375.00	44.50%	28.21	325.81	12.80%	8.07%	74.40%	199.43%	12.48%	100.08%	104.80%
	2009	1,115.00	12,374.00	21,374.00	48.50%	30.20	325.81	10.80%	9.09%	56.33%	222.68%	13.31%	99.88%	104.80%
	2010	1,112.00	12,408.00	24,778.00	44.30%	32.44	325.81	10.40%	8.29%	39.08%	319.31%	11.68%	99.97%	105.30%
	2011	1,122.00	12,760.00	26,971.00	40.60%	36.66	325.81	10.50%	8.71%	38.18%	319.31%	11.68%	99.87%	105.26%
	2012	1,584.00	11,962.00	20,422.00	48.20%	38.95	325.81	15.90%	13.44%	39.18%	320.66%	16.89%	99.39%	106.42%
5-yr Projection	1,535.00	15,750.00	29,260.00	46.50%	40.00	325.81	11.00%	9.75%	38.14%	314.95%	11.71%	99.39%	106.42%	
EE	2000	60.20	701.60	1,152.30	35.80%	8.05	51.20	14.60%	8.59%	50.84%	334.53%	14.59%	99.91%	99.95%
	2001	65.90	769.70	1,098.60	42.10%	9.01	49.99	14.60%	8.59%	56.42%	320.95%	14.63%	100.02%	100.24%
	2002	28.00	699.10	1,071.00	42.80%	9.20	49.61	6.30%	4.20%	51.31%	284.80%	6.36%	100.04%	100.86%
	2003	31.30	664.40	1,268.00	45.10%	10.51	47.56	6.30%	4.71%	51.19%	259.63%	6.26%	99.98%	99.38%
	2004	33.40	708.60	1,283.00	58.40%	11.23	47.40	6.30%	4.71%	55.23%	240.94%	6.27%	99.98%	99.59%
	2005	36.90	803.90	1,281.70	47.70%	11.56	48.14	6.60%	4.55%	62.24%	231.95%	6.57%	99.93%	99.58%
	2006	61.40	816.50	1,332.20	48.50%	12.60	46.00	10.60%	7.52%	61.29%	229.70%	10.59%	99.84%	99.85%
	2007	74.80	877.40	1,321.60	50.40%	14.76	45.15	11.20%	8.53%	60.49%	217.78%	11.23%	100.05%	100.27%
	2008	77.80	1,039.90	1,503.90	46.20%	15.47	44.88	11.20%	7.47%	65.11%	217.78%	11.23%	99.83%	99.72%
	2009	66.90	826.00	1,756.00	47.30%	16.45	43.92	9.30%	8.06%	47.15%	226.01%	11.17%	99.96%	99.75%
	2010	90.30	877.30	1,895.80	48.80%	18.04	42.57	13.80%	10.29%	47.02%	230.31%	11.15%	100.06%	100.42%
	2011	103.50	918.00	1,947.10	48.20%	19.03	42.57	13.80%	11.27%	47.15%	230.31%	11.15%	100.06%	100.42%
	2012	90.80	852.90	1,824.30	45.20%	20.30	40.11	11.00%	10.65%	47.15%	256.21%	13.82%	100.05%	100.08%
5-yr Projection	105.00	1,050.00	2,400.00	42.00%	26.00	38.50	10.50%	10.00%	40.57%	280.26%	10.42%	99.31%	99.21%	
EXC	2000	590.00	7,499.00	20,803.00	34.70%	11.31	639.01	7.80%	7.87%	57.97%	179.20%	8.17%	99.96%	104.79%
	2001	1,485.00	15,140.00	21,719.00	37.80%	12.82	642.01	17.20%	9.88%	110.17%	166.94%	17.80%	99.99%	103.47%
	2002	1,599.00	14,955.00	21,464.00	36.10%	11.97	646.63	20.10%	10.69%	87.28%	221.13%	20.84%	99.89%	102.67%
	2003	1,641.00	15,812.00	22,079.00	38.50%	12.84	662.00	18.90%	10.36%	76.65%	242.69%	19.30%	100.00%	102.69%
	2004	2,162.00	15,357.00	21,659.00	43.50%	14.19	665.20	19.50%	12.70%	67.57%	228.02%	19.57%	100.19%	100.37%
	2005	2,182.00	15,315.00	21,981.00	43.50%	13.70	666.00	23.80%	14.08%	68.86%	240.95%	23.70%	100.02%	100.42%
	2006	2,370.00	15,655.00	20,972.00	45.40%	14.89	670.00	23.70%	15.14%	68.74%	228.32%	23.76%	100.01%	100.25%
	2007	2,730.00	18,916.00	21,871.00	45.70%	15.34	661.00	26.90%	14.43%	78.32%	238.19%	26.92%	99.89%	100.08%
	2008	2,721.00	18,859.00	24,153.00	46.60%	16.78	658.00	24.60%	14.43%	73.06%	233.47%	24.61%	99.89%	100.04%
	2009	2,844.00	17,318.00	23,726.00	52.40%	18.15	660.00	22.50%	16.42%	63.34%	216.40%	22.51%	99.89%	100.08%
	2010	2,587.00	18,644.00	25,851.00	52.90%	20.48	662.00	18.90%	13.77%	62.27%	220.69%	18.92%	99.91%	100.08%
	2011	2,499.00	18,924.00	26,881.00	54.00%	21.70	663.00	17.30%	13.77%	58.10%	220.69%	17.36%	99.83%	100.33%
	2012	1,579.00	23,480.00	45,186.00	53.50%	23.07	665.00	7.30%	6.72%	51.98%	210.85%	7.21%	100.02%	100.67%
5-yr Projection	2,500.00	27,500.00	47,100.00	55.50%	30.50	660.00	9.50%	9.09%	52.68%	199.08%	9.56%	100.34%	100.67%	
FE	2000	661.70	7,028.00	11,295.00	41.50%	20.72	224.53	12.90%	9.41%	92.79%	162.90%	14.23%	100.05%	110.31%
	2001	727.00	7,999.40	14,228.00	37.20%	24.66	297.64	8.90%	9.09%	84.37%	167.82%	9.82%	99.92%	110.31%
	2002	827.80	12,152.00	12,680.00	37.60%	23.92	297.64	10.50%	6.81%	95.84%	177.91%	11.61%	99.89%	109.59%
	2003	480.80	12,307.00	18,414.00	45.00%	25.12	329.84	5.40%	3.98%	92.75%	160.13%	5.92%	99.99%	106.89%
	2004	932.60	12,453.00	18,938.00	45.40%	26.04	329.84	10.60%	7.49%	92.40%	156.76%	10.85%	99.90%	102.33%
	2005	1,088.00	13,780.00	19,380.00	52.40%	27.86	329.84	10.30%	7.93%	85.65%	152.41%	10.35%	100.06%	101.52%
	2006	1,295.00	11,501.00	14,667.00	51.40%	28.30	318.21	13.90%	11.00%	78.41%	162.41%	14.01%	100.03%	100.77%
	2007	1,309.00	12,802.00	15,383.00	50.30%	28.45	304.84	14.60%	10.22%	83.22%	171.37%	14.58%	100.01%	99.86%
	2008	1,342.00	13,627.00	17,723.00	47.70%	27.17	304.84	18.20%	9.65%	76.89%	213.74%	16.18%	99.89%	99.70%
	2009	1,015.00	12,712.00	20,487.00	41.80%	28.08	304.84	11.60%	7.98%	66.33%	213.74%	11.86%	100.05%	99.70%
	2010	1,339.00	13,330.00	19,788.00	40.50%	28.03	304.84	11.50%	7.43%	67.41%	231.30%	11.50%	99.89%	99.86%
	2011	752.00	16,259.00	28,966.00	45.60%	31.75	418.22	5.70%	4.63%	53.59%	223.44%	5.60%	100.00%	99.34%
	2012	891.00	15,294.00	32,903.00	46.30%	31.29	418.22	6.80%	5.63%	46.49%	251.44%	6.81%	100.00%	102.13%
5-yr Projection	1,295.00	16,400.00	37,900.00	44.50%	35.00	425.00	8.50%	7.90%	43.27%	242.23%	7.68%	99.76%	102.20%	



		Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Equity	Profit Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Equity Check	ROE Check
HE	2000	84.60	1,116.00	2,061.30	2,101.20	39.90%	12.72	65.38	9.80%	4.92%	82.20%	249.45%	10.09%	100.11%	102.97%
	2001	109.80	1,727.30	2,067.50	2,235.80	41.60%	13.06	71.20	11.60%	6.36%	83.55%	222.29%	11.81%	99.99%	101.77%
	2002	120.20	1,653.70	2,079.30	2,251.00	46.50%	14.21	73.62	11.30%	7.27%	79.03%	188.05%	11.46%	99.95%	101.92%
	2003	120.10	1,781.30	2,311.90	2,186.90	48.80%	14.36	75.84	10.80%	6.74%	77.53%	212.28%	11.03%	100.00%	102.11%
	2004	109.60	1,924.10	2,422.30	2,375.10	51.00%	15.01	80.99	8.90%	5.70%	79.43%	189.98%	8.05%	99.89%	101.88%
	2005	120.30	2,215.60	2,542.80	2,283.90	53.30%	15.02	80.98	9.70%	5.43%	87.13%	208.89%	10.04%	100.00%	101.88%
	2006	106.90	2,460.90	2,647.50	2,252.70	48.60%	13.44	81.48	9.90%	4.47%	82.93%	215.5%	10.04%	100.00%	101.40%
	2007	93.60	2,536.40	2,743.40	2,501.80	51.00%	15.29	83.43	7.20%	3.89%	100.71%	209.35%	7.34%	99.99%	101.89%
	2008	92.20	3,218.90	2,907.40	2,635.20	52.70%	15.35	90.52	6.50%	2.88%	110.71%	209.35%	6.64%	100.05%	102.14%
	2009	84.90	2,309.60	3,068.60	2,840.80	50.70%	15.59	92.26	2.80%	2.88%	110.71%	214.44%	5.89%	100.08%	101.63%
	2010	115.40	2,695.00	3,165.90	2,732.90	54.30%	17.17	94.26	7.70%	4.33%	84.18%	213.34%	7.78%	99.99%	100.99%
	2011	140.10	3,242.30	3,334.50	2,841.30	54.30%	18.95	96.84	9.00%	4.32%	97.23%	217.73%	9.15%	100.02%	101.65%
IDA	2000	164.90	3,375.00	3,584.60	3,011.00	51.00%	18.28	97.93	10.20%	4.88%	93.89%	225.59%	10.35%	100.05%	101.45%
	2001	240.00	4,100.00	3,375.00	3,075.00	51.50%	21.00	124.50	9.00%	5.65%	76.28%	205.65%	9.18%	100.03%	102.03%
	2002	137.80	1,019.40	1,805.00	1,780.00	45.90%	23.12	37.61	16.00%	13.50%	56.48%	219.89%	16.75%	99.88%	104.67%
	2003	130.00	5,648.00	1,886.00	1,816.00	47.90%	23.15	37.63	14.40%	2.30%	289.47%	216.58%	14.93%	100.04%	103.67%
	2004	68.30	928.80	1,906.50	1,826.90	47.90%	23.01	38.02	7.00%	7.14%	48.72%	217.85%	7.58%	99.97%	108.23%
	2005	40.10	782.70	2,088.30	1,892.50	46.40%	22.54	38.24	4.20%	7.12%	37.48%	241.85%	4.64%	99.74%	110.48%
	2006	77.80	844.50	2,209.50	1,987.80	50.70%	23.88	42.22	7.20%	9.21%	38.22%	219.24%	7.72%	100.04%	107.22%
	2007	63.70	859.50	2,314.30	2,048.80	50.00%	24.04	42.66	6.20%	7.41%	37.14%	225.92%	6.22%	100.04%	107.22%
	2008	100.10	926.30	2,491.10	2,052.80	54.80%	25.77	43.63	8.90%	10.81%	37.18%	221.44%	8.90%	99.82%	100.18%
	2009	82.30	879.40	2,616.80	2,384.20	51.10%	26.79	45.06	6.80%	9.36%	33.61%	216.58%	7.55%	99.99%	99.40%
	2010	98.40	960.40	2,758.20	2,485.90	52.40%	27.76	48.92	7.80%	10.23%	35.99%	216.58%	8.90%	99.95%	99.89%
	2011	142.50	1,049.80	2,917.00	2,607.10	50.70%	29.17	47.90	9.30%	13.75%	32.77%	208.45%	9.31%	100.06%	100.06%
TEG	2000	168.90	1,026.80	3,408.60	3,045.20	54.40%	31.01	48.91	8.00%	16.25%	30.14%	205.84%	10.07%	100.08%	100.07%
	2001	168.90	1,060.70	3,536.00	3,223.40	54.50%	35.07	50.16	9.60%	15.63%	30.14%	205.84%	10.07%	100.08%	100.09%
	2002	165.00	1,300.00	3,195.00	4,105.00	54.00%	43.45	51.00	8.50%	14.23%	25.02%	234.36%	8.35%	99.97%	98.19%
	2003	94.50	4,321.30	1,828.70	1,926.20	52.10%	27.18	38.34	9.10%	2.19%	236.30%	182.22%	9.42%	103.84%	103.48%
	2004	480.60	4,800.60	2,002.60	2,008.60	54.40%	29.30	42.22	14.00%	3.19%	244.21%	183.27%	14.30%	113.21%	102.11%
	2005	151.80	6,982.70	2,049.40	2,222.40	58.70%	32.47	42.66	11.80%	2.26%	330.74%	157.10%	12.07%	106.18%	102.25%
	2006	181.10	6,982.70	2,534.80	2,871.90	53.40%	35.61	43.63	9.70%	2.20%	271.84%	185.28%	9.89%	101.31%	101.91%
	2007	181.10	10,292.00	4,463.80	5,552.00	58.30%	42.58	75.99	5.50%	1.76%	230.57%	137.91%	4.00%	98.96%	101.73%
	2008	124.80	10,048.00	4,773.30	5,438.70	57.00%	40.79	75.99	3.90%	0.89%	294.30%	153.97%	4.03%	99.96%	103.22%
	2009	178.20	7,099.80	4,945.10	5,304.40	53.90%	37.62	75.98	6.10%	2.38%	151.06%	172.96%	6.23%	99.86%	102.17%
	2010	255.90	5,203.20	5,013.40	5,118.50	58.80%	37.57	77.35	8.70%	4.92%	103.79%	172.44%	7.80%	100.05%	101.31%
	2011	230.90	4,708.70	5,199.10	4,884.50	60.60%	38.01	77.91	7.00%	6.98%	90.57%	175.44%	9.77%	100.01%	101.30%
	2012	284.20	4,212.40	5,501.90	5,008.60	60.40%	38.84	77.90	8.00%	6.98%	76.25%	169.87%	9.77%	100.01%	101.30%
MGEE	2000	355.00	6,200.00	8,350.00	7,525.00	53.00%	46.50	86.00	8.00%	3.73%	74.25%	209.37%	8.90%	100.27%	98.90%
	2001	27.40	324.10	342.80	393.70	52.20%	12.05	16.62	13.70%	8.45%	94.54%	171.15%	13.88%	99.99%	99.85%
	2002	333.70	4,012.00	4,191.50	4,191.50	54.20%	12.67	17.07	12.60%	8.15%	83.18%	185.84%	12.59%	100.08%	99.89%
	2003	29.20	347.10	537.50	419.50	54.20%	12.94	17.07	12.60%	8.15%	83.18%	185.84%	12.59%	99.99%	99.89%
	2004	30.60	419.50	537.50	465.30	56.50%	14.34	18.34	11.60%	7.62%	74.70%	204.45%	11.64%	100.04%	100.34%
	2005	32.40	424.80	607.40	540.50	62.80%	16.59	20.39	10.00%	7.95%	69.95%	179.52%	9.99%	99.98%	99.80%
	2006	42.40	513.40	667.70	566.20	60.70%	16.81	20.45	9.30%	6.25%	76.88%	184.28%	9.34%	100.02%	100.43%
	2007	42.40	507.50	728.40	612.60	61.30%	17.89	20.98	11.30%	8.35%	69.67%	183.97%	11.29%	99.95%	99.92%
	2008	48.80	537.80	844.00	660.10	64.80%	19.49	21.95	11.40%	8.08%	63.70%	187.31%	11.41%	100.01%	100.08%
	2009	52.80	598.00	901.20	750.60	63.70%	20.88	22.80	11.00%	8.86%	66.13%	188.49%	11.04%	100.00%	100.30%
	2010	51.00	533.80	939.80	822.70	61.00%	21.71	23.11	10.20%	9.55%	56.80%	187.27%	10.16%	99.97%	99.63%
	2011	57.70	532.60	968.00	856.40	61.10%	22.72	23.11	11.00%	10.83%	55.02%	184.35%	10.89%	99.97%	99.63%
	2012	60.90	546.40	985.80	911.80	60.40%	23.84	23.11	11.10%	11.15%	54.68%	185.71%	11.04%	100.03%	99.61%
NU	2000	65.00	680.00	1,400.00	1,170.00	64.00%	31.90	23.50	11.50%	12.30%	46.57%	166.97%	11.35%	99.96%	100.10%
	2001	14.40	5,876.60	3,547.20	4,546.80	48.80%	15.43	143.82	NMIF	-0.25%	165.67%	159.87%	-0.65%	99.95%	NA
	2002	186.40	6,873.80	3,622.10	6,844.70	32.40%	15.27	130.13	8.50%	2.71%	179.84%	180.25%	8.79%	99.85%	103.42%
	2003	144.20	5,216.30	4,728.40	6,513.60	34.30%	17.33	127.56	6.30%	2.76%	110.32%	214.15%	6.53%	100.12%	103.66%
	2004	162.70	6,098.20	5,464.20	6,749.40	34.00%	17.70	129.03	6.90%	2.88%	111.77%	240.16%	7.20%	100.14%	104.29%
	2005	122.10	6,095.70	5,464.20	6,749.40	34.00%	17.70	129.03	5.10%	1.83%	114.03%	255.54%	5.32%	100.08%	104.33%
	2006	128.30	6,095.70	5,464.20	6,749.40	35.10%	18.46	131.59	5.10%	2.33%	85.82%	284.08%	5.29%	99.96%	103.69%
	2007	251.50	5,822.20	6,242.20	7,952.00	39.70%	18.14	154.23	4.30%	1.83%	110.29%	222.86%	4.51%	99.93%	104.83%
	2008	298.20	5,900.10	7,229.90	7,431.10	39.20%	18.65	156.22	8.40%	5.11%	80.53%	248.20%	6.03%	100.02%	102.76%
	2009	335.60	5,439.40	8,207.90	7,926.20	38.10%	19.38	155.83	9.60%	5.11%	70.66%	271.80%	9.61%	100.00%	102.17%
	2010	377.80	4,988.20	8,940.40	8,629.50	41.50%	20.37	175.62	9.20%	6.17%	61.53%	246.84%	9.37%	99.80%	101.86%
	2011	400.30	4,465.70	9,567.70	8,741.80	43.60%	21.60	176.45	9.80%	7.71%	51.20%	258.31%	9.81%	100.00%	101.95%
	2012	533.00	6,273.80	18,005.00	16,675.00	55.40%	29.41	314.05	5.70%	8.90%	42.93%	239.31%	8.99%	99.98%	101.82%
5-yr Projection		1,040.00	8,450.00	20,900.00	20,900.00	53.00%	34.50	319.00	9.50%	12.31%	40.43%	186.86%	9.59%	99.35%	98.63%



		Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Equity	Profit Margin	Asset Turnover	Calculated		Common	
												Return on Equity	Equity Multiplier	Equity Check	ROE Check
PNW	2000	283.60	3,690.20	5,133.20	4,337.80	54.90%	28.09	84.83	11.90%	7.69%	71.89%	11.91%	215.55%	100.06%	100.07%
	2001	312.20	4,551.40	5,907.30	5,172.40	48.30%	29.46	84.83	12.50%	6.86%	77.05%	12.50%	236.46%	100.03%	99.97%
	2002	215.20	2,637.30	6,479.40	5,987.90	48.20%	29.44	91.26	8.00%	8.16%	80.78%	8.02%	241.43%	100.11%	100.23%
	2003	230.60	2,817.90	7,480.10	5,727.50	49.40%	31.00	91.29	8.00%	8.11%	37.67%	8.15%	284.37%	100.02%	100.62%
	2004	235.20	2,890.70	7,535.50	5,535.20	53.30%	32.14	91.79	8.00%	8.11%	38.48%	8.51%	255.42%	100.00%	99.65%
	2005	223.20	2,988.00	7,577.10	6,033.40	59.80%	34.57	99.98	6.50%	7.47%	39.43%	6.51%	221.10%	99.95%	100.20%
	2006	217.10	3,401.70	7,881.90	6,678.70	51.60%	34.48	99.96	9.20%	6.38%	43.16%	9.30%	228.11%	100.01%	99.61%
	2007	268.80	3,523.60	8,436.40	6,658.70	53.00%	35.15	100.49	8.50%	8.40%	37.71%	8.41%	238.05%	100.09%	99.61%
	2008	213.80	3,367.10	8,916.70	6,477.80	53.20%	34.16	100.88	6.50%	6.95%	37.75%	6.91%	259.75%	100.01%	99.98%
	2009	229.20	3,297.10	9,257.80	6,986.80	49.90%	32.66	100.84	8.00%	8.00%	34.07%	8.98%	280.24%	100.06%	99.74%
	2010	330.40	3,263.80	9,576.80	6,723.00	52.70%	32.86	100.77	9.00%	10.12%	32.54%	9.93%	260.52%	99.93%	99.80%
	2011	328.20	3,241.40	9,966.80	6,606.80	55.90%	34.98	108.77	8.00%	10.13%	32.54%	9.99%	261.85%	99.98%	99.49%
5-yr Projection	2012	387.40	3,581.80	10,965.00	7,171.80	55.00%	36.20	109.74	9.80%	11.73%	31.76%	9.75%	261.85%	99.57%	97.78%
	2013	480.00	3,950.00	12,950.00	7,711.80	59.50%	42.50	115.00	10.00%	12.15%	30.50%	9.78%	263.81%	98.57%	97.78%
POR	2004	92.00	1,454.00	2,275.00	2,171.00	58.90%	NA	NA	7.20%	6.33%	63.91%	7.19%	177.91%	NA	99.83%
	2005	64.00	1,446.00	2,438.00	2,076.00	57.70%	19.15	62.50	5.30%	4.43%	59.36%	5.34%	203.36%	99.92%	100.81%
	2006	71.00	1,520.00	2,718.00	2,161.00	56.80%	19.58	62.50	5.80%	4.67%	55.92%	5.80%	222.22%	100.81%	100.08%
	2007	145.00	1,743.00	3,066.00	2,629.00	50.10%	21.05	62.53	11.00%	8.32%	56.85%	11.01%	232.79%	99.93%	100.08%
	2008	87.00	1,745.00	3,301.00	2,518.00	53.80%	21.64	62.58	6.40%	4.99%	54.67%	6.42%	243.67%	99.97%	100.35%
	2009	95.00	1,804.00	3,858.00	3,100.00	49.70%	20.50	75.21	6.20%	5.27%	46.76%	6.17%	250.41%	100.07%	99.45%
	2010	125.00	1,783.00	4,133.00	3,390.00	47.00%	21.14	75.32	7.90%	7.01%	43.14%	7.85%	259.40%	99.84%	99.31%
	2011	147.00	1,813.00	4,285.00	3,380.00	50.40%	22.07	75.36	8.80%	8.11%	42.31%	8.84%	257.79%	100.05%	100.05%
	2012	141.00	1,805.00	4,392.00	3,264.00	52.90%	22.87	75.58	8.20%	7.81%	41.10%	8.11%	257.79%	100.05%	99.50%
	5-yr Projection	165.00	2,100.00	4,825.00	3,950.00	52.00%	26.75	76.75	8.00%	7.86%	43.32%	8.03%	234.91%	99.95%	100.41%
PEG	2000	858.00	9,488.00	7,702.00	10,501.00	38.10%	19.21	207.97	19.10%	9.03%	123.32%	19.03%	192.51%	99.66%	112.26%
	2001	842.00	9,815.00	10,064.00	15,163.00	24.30%	20.10	205.64	18.60%	8.58%	97.53%	20.37%	243.45%	100.09%	109.51%
	2002	842.80	9,390.00	11,448.00	16,778.00	24.30%	17.70	225.27	19.70%	10.05%	73.26%	21.18%	287.67%	100.19%	107.50%
	2003	956.00	11,481.00	12,722.00	18,554.00	29.80%	11.71	472.27	15.40%	7.70%	89.49%	15.48%	224.67%	100.53%	100.32%
	2004	862.00	10,998.00	13,750.00	18,744.00	30.60%	12.05	476.20	12.80%	6.50%	79.97%	12.84%	230.73%	100.04%	100.32%
	2005	862.00	12,430.00	13,336.00	17,381.00	34.80%	11.99	502.33	14.20%	6.93%	93.21%	14.33%	221.76%	100.15%	100.94%
	2006	934.00	12,164.00	13,002.00	17,197.00	30.20%	13.35	505.29	13.80%	7.88%	93.55%	13.92%	250.35%	129.89%	130.32%
	2007	1323.00	12,853.00	13,275.00	16,041.00	45.50%	14.35	508.52	18.10%	10.29%	96.82%	18.13%	181.88%	99.98%	100.15%
	2008	1477.00	14,139.00	14,433.00	15,856.00	49.00%	15.36	508.02	19.00%	10.45%	97.96%	18.77%	165.77%	100.04%	100.05%
	2009	1567.00	12,431.00	15,440.00	16,513.00	53.20%	17.37	505.97	18.20%	12.61%	80.51%	17.84%	175.76%	100.05%	100.21%
	2010	1577.00	11,793.00	16,390.00	17,452.00	55.20%	19.04	505.97	16.30%	13.20%	71.95%	16.16%	170.14%	100.04%	99.77%
	2011	1577.00	11,343.00	17,484.00	17,731.00	57.90%	20.30	505.95	15.40%	13.90%	63.55%	15.36%	173.86%	100.04%	99.75%
5-yr Projection	2012	1,239.00	9,781.00	19,736.00	17,467.00	61.70%	21.31	505.89	11.50%	12.07%	48.56%	11.50%	163.13%	100.04%	99.51%
	2013	1,285.00	10,900.00	24,400.00	23,200.00	56.00%	25.75	506.00	10.00%	11.79%	44.67%	9.89%	167.81%	100.29%	98.81%
SRE	2000	440.00	7,443.00	5,726.00	6,166.00	40.40%	12.35	201.80	17.20%	6.16%	124.75%	17.66%	229.89%	100.10%	102.89%
	2001	534.00	8,028.00	6,217.00	6,532.00	41.20%	12.71	204.48	19.40%	6.65%	129.15%	19.84%	231.01%	100.07%	102.28%
	2002	588.00	8,020.00	6,832.00	7,331.00	38.00%	13.79	204.91	20.40%	9.73%	88.11%	20.76%	242.06%	100.12%	101.78%
	2003	855.00	7,897.00	10,414.00	9,755.00	48.00%	17.17	226.80	16.60%	8.30%	75.30%	16.65%	260.52%	100.12%	101.53%
	2004	930.00	8,171.00	11,466.00	9,955.00	52.60%	20.78	234.18	18.90%	9.89%	84.88%	19.10%	227.73%	99.96%	101.08%
	2005	1,118.00	11,731.00	12,101.00	11,778.00	55.10%	23.95	257.19	14.40%	7.65%	96.99%	14.58%	196.47%	100.01%	101.25%
	2006	1,118.00	11,761.00	12,229.00	12,229.00	61.40%	28.86	263.01	14.80%	9.51%	99.27%	14.89%	175.47%	100.30%	100.61%
	2007	1,135.00	11,438.00	14,884.00	13,071.00	63.70%	31.87	261.21	13.50%	8.92%	76.85%	13.63%	211.79%	99.88%	100.97%
	2008	1,123.00	10,758.00	16,895.00	14,692.00	54.20%	32.75	243.32	14.00%	10.44%	83.79%	14.10%	178.76%	100.07%	100.73%
	2009	1,193.00	8,106.00	16,281.00	16,646.00	54.10%	36.54	246.51	13.10%	14.72%	44.34%	13.25%	203.00%	100.02%	101.13%
	2010	1,068.00	9,003.00	19,876.00	18,186.00	49.60%	37.54	240.45	11.10%	11.20%	45.30%	11.17%	220.35%	100.07%	100.67%
	2011	1,068.00	10,036.00	23,572.00	20,015.00	49.20%	41.00	239.93	11.00%	10.84%	42.58%	10.50%	239.37%	99.60%	100.44%
5-yr Projection	2012	1,079.00	9,647.00	25,181.00	22,002.00	46.70%	42.42	242.37	10.40%	11.18%	38.30%	10.50%	245.17%	100.06%	100.87%
	2013	1,470.00	11,800.00	31,900.00	28,700.00	48.00%	53.00	250.00	10.50%	12.46%	36.89%	11.15%	241.63%	100.36%	106.04%
TE	2000	250.80	2,295.10	3,970.10	2,881.50	52.30%	11.93	126.30	16.70%	10.93%	57.81%	16.65%	263.44%	99.98%	99.69%
	2001	303.70	2,648.60	4,838.30	3,814.10	51.70%	14.12	139.50	15.10%	11.47%	54.74%	15.40%	245.36%	99.86%	100.01%
	2002	288.20	2,675.80	5,464.00	6,585.10	39.70%	16.83	139.50	9.90%	11.14%	48.97%	11.41%	209.01%	99.93%	115.22%
	2003	(14.70)	2,740.00	5,679.00	6,103.80	24.80%	6.83	187.80	NMFE	-0.54%	48.25%	-0.88%	338.06%	100.10%	NA
	2004	137.40	2,696.10	4,568.80	5,300.80	34.00%	7.85	189.70	10.70%	5.15%	57.30%	10.69%	362.25%	99.86%	99.87%
	2005	211.00	3,148.10	4,766.80	5,133.80	35.00%	8.25	209.50	13.30%	7.01%	65.91%	13.27%	287.18%	100.15%	99.76%
	2006	265.80	3,536.10	4,888.20	5,175.40	39.00%	9.56	210.90	14.10%	7.52%	72.33%	14.13%	275.61%	99.93%	100.22%
	2007	162.40	3,375.30	5,221.30	5,214.30	38.50%	8.43	212.90	8.10%	4.81%	72.34%	13.17%	242.18%	99.80%	99.76%
	2008	213.90	3,310.50	5,544.10	5,287.00	39.40%	9.75	213.90	10.30%	6.46%	64.64%	10.27%	266.15%	100.01%	99.87%
	2009	242.80	3,487.90	5,841.00	5,317.80	40.60%	10.10	214.90	11.20%	6.96%	59.71%	12.01%	269.21%	100.12%	99.96%
	2010	272.80	3,343.40	5,967.80	5,317.80	45.80%	10.50	215.80	12.00%	8.15%	56.02%	12.01%	263.03%	99.87%	100.12%
	2011	246.00	2,996.60	5,980.10	4,953.90	43.50%	10.58	216.60	10.70%	8.21%	50.03%	10.74%	261.57%	100.07%	100.36%
	2012	315.00	3,400.00	7,350.00	5,750.00	45.00%	12.00	217.00	12.00%	9.26%	46.26%	12.17%	284.06%	100.64%	101.45%
5-yr Projection	2013	315.00	3,400.00	7,350.00	5,750.00	45.00%	12.00	217.00	12.00%	9.26%	46.26%	12.17%	284.06%	100.64%	101.45%

	Net Profit	Revenue	Net Plant	Total Capital	Common Equity Ratio	Book Value per Share	Shares Outstanding	Reported Return on Com Equity	Profit Margin	Asset Turnover	Equity Multiplier	Calculated Return on Equity	Common Equity Check	ROE Check
UIL	2000	59.90	880.90	550.70	1,001.30	47.80%	20.42	23.46	12.50%	6.80%	159.96%	115.06%	100.08%	100.12%
	2001	44.00	1,085.80	546.40	988.80	50.10%	21.25	23.53	11.90%	5.47%	198.72%	109.21%	98.94%	99.77%
	2002	49.40	1,131.00	517.10	977.80	50.00%	20.28	23.78	9.10%	3.88%	218.72%	107.11%	98.93%	100.15%
	2003	29.50	963.70	548.80	988.20	49.80%	20.65	23.86	6.00%	3.05%	175.80%	111.29%	99.92%	99.71%
	2004	36.90	1,101.30	563.90	1,039.60	52.80%	22.84	24.01	6.70%	3.35%	195.30%	102.73%	99.81%	100.33%
	2005	31.40	1,213.10	592.10	1,031.50	52.60%	22.39	24.32	5.80%	2.99%	204.88%	108.72%	99.96%	99.40%
	2006	45.40	846.00	647.00	869.20	53.00%	18.53	24.86	9.90%	5.37%	130.76%	140.45%	100.00%	99.55%
	2007	46.70	982.00	678.40	943.60	48.20%	18.55	25.03	10.10%	4.76%	111.79%	182.21%	100.00%	99.75%
	2008	48.10	948.70	1,073.60	1,023.60	48.40%	18.95	25.17	10.10%	5.07%	111.79%	182.21%	100.00%	99.75%
	2009	54.30	896.60	1,153.00	1,247.70	46.00%	19.15	28.96	8.50%	7.10%	91.76%	200.89%	99.98%	100.59%
	2010	70.30	997.70	2,327.50	2,597.90	41.60%	17.41	29.86	6.50%	6.05%	71.76%	216.20%	100.04%	100.46%
	2011	89.70	1,570.40	2,370.40	2,942.60	41.40%	21.81	50.65	9.10%	7.05%	42.87%	234.94%	100.00%	100.14%
5-yr Projection	2012	103.70	1,466.50	2,717.00	2,942.60	41.10%	21.95	50.87	9.30%	6.98%	249.62%	233.21%	99.86%	99.21%
		130.00	1,850.00	3,200.00		45.50%	28.45	51.00	9.00%	6.98%	55.92%		99.85%	99.21%
VVC	2000	72.00	1,648.70	1,555.80	1,360.80	53.00%	11.91	61.42	9.70%	4.37%	105.97%	212.62%	99.97%	101.44%
	2001	73.10	2,170.00	1,595.00	1,863.10	45.50%	12.53	68.01	8.50%	3.37%	136.05%	188.15%	100.07%	101.45%
	2002	114.00	1,804.30	1,648.10	1,824.40	47.70%	12.79	67.01	13.10%	6.32%	109.48%	188.38%	99.96%	100.00%
	2003	111.20	1,587.60	2,003.70	2,144.70	50.00%	14.18	75.80	10.40%	7.00%	79.23%	186.85%	99.97%	99.71%
	2004	108.00	1,689.80	2,156.20	2,111.50	51.80%	14.42	75.90	9.90%	6.30%	78.37%	197.14%	100.07%	99.74%
	2005	136.80	2,028.00	2,251.90	2,341.30	48.80%	15.01	76.19	12.00%	6.75%	90.06%	197.09%	100.09%	99.76%
	2006	108.80	2,041.80	2,385.50	2,382.20	49.30%	15.43	76.10	9.30%	5.33%	85.98%	203.12%	99.96%	99.61%
	2007	143.10	2,281.90	2,539.70	2,479.10	48.80%	16.16	76.36	11.60%	6.27%	89.85%	205.71%	99.85%	99.82%
	2008	129.00	2,464.70	2,720.30	2,590.50	52.00%	16.68	81.03	9.50%	5.10%	91.34%	205.71%	99.85%	100.65%
	2009	145.00	2,069.90	2,878.80	2,897.70	47.80%	17.23	81.10	10.40%	6.94%	101.24%	205.71%	99.82%	99.71%
	2010	133.70	2,129.50	2,955.40	2,874.10	50.10%	17.61	81.70	8.30%	6.83%	72.95%	205.71%	99.83%	99.71%
	2011	141.60	2,325.20	3,032.60	2,874.10	48.40%	17.61	81.70	8.30%	6.83%	72.95%	205.71%	99.82%	99.70%
5-yr Projection	2012	159.00	2,232.80	3,119.80	3,075.30	49.60%	18.71	82.20	10.40%	7.12%	71.57%	204.24%	99.84%	100.08%
		225.00	3,100.00	3,900.00		51.30%	23.00	87.00	11.50%	7.26%	86.11%	179.24%	99.63%	97.41%
WR	2000	62.70	2,368.50	3,993.40	5,169.30	36.90%	27.20	70.08	3.20%	2.65%	59.31%	209.36%	99.93%	102.72%
	2001	61.00	2,186.30	4,042.90	4,822.40	37.70%	25.97	70.08	NMF	-1.83%	54.08%	222.36%	100.11%	NA
	2002	72.00	1,771.10	3,995.40	4,272.40	22.90%	13.68	71.51	7.30%	4.07%	44.33%	408.37%	99.99%	100.81%
	2003	108.10	1,461.10	3,909.50	3,127.30	33.20%	14.23	72.84	10.30%	7.40%	37.37%	376.54%	99.83%	101.08%
	2004	100.10	1,464.50	3,911.00	3,049.20	45.50%	16.13	86.03	7.10%	6.84%	37.45%	281.90%	100.02%	101.62%
	2005	134.90	1,593.30	3,947.70	3,000.40	47.20%	16.31	86.84	9.50%	8.52%	40.11%	278.76%	100.01%	100.27%
	2006	165.30	1,805.70	4,071.60	3,124.20	49.30%	17.62	87.39	10.70%	10.29%	39.44%	284.35%	99.97%	100.30%
	2007	168.40	1,726.80	4,893.70	3,738.30	48.90%	19.14	95.46	9.20%	9.75%	35.95%	262.76%	99.95%	100.13%
	2008	138.80	1,830.00	5,533.50	4,400.10	49.70%	20.18	108.31	6.20%	7.44%	33.23%	253.04%	99.85%	100.06%
	2009	141.30	1,856.20	5,771.70	4,696.80	48.10%	20.59	109.07	6.30%	7.60%	32.20%	257.25%	99.87%	99.87%
	2010	203.80	2,056.20	6,306.50	5,180.90	46.00%	21.25	112.13	9.50%	8.92%	32.20%	257.25%	99.87%	100.65%
	2011	214.00	2,171.00	6,745.40	5,531.00	50.10%	22.03	123.70	7.70%	8.25%	32.18%	253.18%	99.83%	100.30%
5-yr Projection	2012	275.10	2,261.50	7,355.70	5,936.20	48.80%	22.68	135.00	9.50%	12.16%	30.83%	253.14%	99.92%	100.88%
		375.00	2,800.00	9,000.00		50.00%	29.95	135.00	9.50%	13.39%	31.11%	225.00%	100.07%	98.69%
XEL	2000	545.80	11,692.00	15,273.00	13,745.00	40.50%	16.37	339.79	9.70%	4.71%	75.90%	274.36%	99.92%	101.08%
	2001	761.60	15,025.00	21,165.00	18,911.00	32.80%	17.95	345.02	12.60%	5.22%	71.00%	341.22%	99.84%	100.40%
	2002	117.60	9,524.40	18,616.00	11,815.00	39.50%	11.70	398.71	3.70%	1.86%	50.62%	403.18%	99.96%	102.85%
	2003	510.00	7,937.50	13,667.00	11,790.00	43.80%	12.95	398.96	9.80%	6.43%	58.08%	264.86%	100.05%	100.78%
	2004	526.80	8,345.30	14,068.00	11,801.00	44.10%	12.99	400.46	10.00%	6.31%	59.20%	270.86%	99.96%	101.24%
	2005	489.00	9,625.50	14,068.00	11,396.00	47.30%	13.37	403.39	9.20%	5.18%	65.50%	272.59%	100.04%	100.61%
	2006	568.70	8,840.30	15,549.00	12,371.00	47.00%	14.28	407.30	9.70%	5.78%	63.29%	267.42%	100.03%	100.83%
	2007	575.90	10,034.00	16,076.00	12,748.00	49.40%	14.70	428.78	9.10%	5.74%	60.17%	264.80%	100.09%	100.48%
	2008	645.70	11,203.00	17,680.00	14,800.00	47.10%	15.35	453.79	9.20%	5.76%	63.33%	253.76%	99.93%	100.58%
	2009	685.50	9,844.30	18,508.00	15,277.00	47.70%	15.92	457.51	9.40%	7.11%	52.11%	253.98%	99.85%	100.88%
	2010	727.00	10,311.00	20,663.00	17,452.00	46.30%	16.76	482.33	8.90%	7.05%	49.90%	255.72%	99.85%	100.06%
	2011	841.40	10,655.00	22,353.00	17,331.00	46.90%	17.44	489.49	9.50%	7.80%	47.87%	255.72%	99.85%	100.06%
5-yr Projection	2012	905.20	10,428.00	23,069.00	19,018.00	46.70%	18.19	487.96	10.20%	7.80%	47.87%	255.72%	99.85%	100.06%
		1,185.00	12,750.00	30,400.00	23,600.00	50.00%	23.00	514.00	10.00%	8.29%	41.84%	257.63%	99.94%	99.82%
													100.19%	100.42%

Source: Value Line company reports as of July 5, 2013. Projected values are for the 2016-2018 forecast period.



**BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2013-59-E**

In the Matter of

Application of Duke Energy Carolinas, LLC  
For Authority to Adjust and Increase Its  
Electric Rates and Charges

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**REBUTTAL TESTIMONY OF  
CAROL E. SHRUM FOR  
DUKE ENERGY CAROLINAS, LLC**

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**I.     INTRODUCTION AND PURPOSE**

1     **Q.     PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**  
2     **POSITION.**

3     A.     My name is Carol E. Shrum, and my business address is 526 South Church Street,  
4             Charlotte, North Carolina. I am Director, Rates and Regulatory Strategy –  
5             Carolinas.

6     **Q.     MS. SHRUM DID YOU FILE DIRECT TESTIMONY IN THIS DOCKET?**

7     A.     Yes.

8     **Q.     WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9     A.     My testimony rebuts the testimony filed by several witnesses, namely Steve  
10            Chriss of Wal-Mart Stores, East, LP and Sam's East, Inc. ("Walmart"), Frank  
11            Knapp of the South Carolina Small Business Chamber of Commerce ("SB  
12            Chamber") and Kevin O'Donnell of the South Carolina Energy Users Committee  
13            ("SCEUC").

14    **Q.     SOUTH CAROLINA ENERGY USERS COMMITTEE WITNESS**  
15    **O'DONNELL RECOMMENDS ON PAGE 42 OF HIS TESTIMONY THAT**  
16    **THE COMMISSION REDUCE DUKE'S REQUEST IN THIS CASE BY \$79**  
17    **MILLION TO ACCOUNT FOR LOWER THAN NORMAL TEST YEAR**  
18    **SALES. DO YOU AGREE?**

19    A.     No. Contrary to Witness O'Donnell's assertion, the test year reflects nearly  
20            normal sales. Witness O'Donnell states in his testimony that the \$79 million  
21            amount he recommends as a reduction in Duke Energy Carolinas' request for a  
22            revenue increase was provided to him by the Company to explain the amount of

1 the revenue increase resulting from lower sales volumes in the test year. Witness  
2 O'Donnell erroneously concludes that the Company failed to make an adjustment  
3 to its cost of service in the amount of \$79 million in order to normalize for lower  
4 sales in the test year when compared with the level of sales the Company would  
5 have in the test year under normal weather conditions.

6 The Company did not make an adjustment to the test year sales to  
7 normalize for weather because the test year already reflects sales volumes under  
8 nearly normal weather. However, rates in our last proceeding were set using  
9 higher sales volumes from that test year versus the nearly normal sales from the  
10 test year for this case. Accordingly, on an "apples to apples" comparison, the \$79  
11 million increase in this case could only have been avoided if the Company  
12 continued to experience a higher than normal sales volume as it did in the last  
13 case. Sales in the test year, however, reflected a sales volume under nearly  
14 normal weather conditions, thereby contributing to the Company not earning its  
15 allowed rate of return in the test year. As a result, in this proceeding, the  
16 Company is seeking an increase in rates in order to set rates using test year sales  
17 which reflects a sales volume at nearly normal weather conditions, which, I  
18 believe, is what Witness O'Donnell is advocating on lines 13 through 16 of his  
19 testimony. Therefore, Witness O'Donnell's rate decrease recommendation in this  
20 regard is not required in order for the Public Service Commission of South  
21 Carolina ("the Commission") to accomplish his recommendation to normalize test  
22 year sales in this case.



1    **Q.     IS WITNESS O'DONNELL ADVOCATING THAT THE COMMISSION**  
2       **DEPART FROM ITS OWN PRECEDENT?**

3    **A.**    Yes. This Commission has not, to our knowledge, approved the sort of  
4       normalization that Mr. O'Donnell now seeks.

5    **Q.     SOUTH CAROLINA ENERGY USERS COMMITTEE WITNESS**  
6       **O'DONNELL RECOMMENDS THE COMMISSION DISALLOW ANY**  
7       **PROVISION IN COST OF SERVICE FOR THE COMPANY'S NORMAL,**  
8       **ON-GOING LEVEL OF COSTS RELATED TO STORMS. DO YOU**  
9       **AGREE?**

10   **A.**    No. As shown on Witness O'Donnell's chart on page 43 of his testimony, the  
11       Company experienced in the test year an unusually low maintenance cost related to  
12       the usual occurrence of storms in our service area. Clearly, this level of costs is  
13       abnormally low and cannot be expected in the future. Therefore, the Company  
14       adjusted cost of service in this proceeding to reflect a more appropriate level of  
15       on-going storm costs one might expect based on history. The Company's request  
16       in the case is to include \$8.7 million for an on-going annual level of recurring  
17       storm costs based on storm costs experienced over the last ten years adjusted for  
18       inflation.

1   **Q.   WALMART WITNESS CHRISS RECOMMENDS TO THE**  
2       **COMMISSION TO ELIMINATE THE COMPANY’S REQUEST TO**  
3       **INCLUDE CONSTRUCTION WORK IN PROGRESS (“CWIP”) IN RATE**  
4       **BASE. DO YOU AGREE WITH THIS RECOMMENDATION?**

5   A.   No, I do not. The inclusion of CWIP in rate base during the construction of  
6       capital projects ultimately benefits the Company’s customers because it saves  
7       them money. The Company proposed an adjustment to rate base to include CWIP  
8       related to certain capital projects based on and in accordance with the well-  
9       established policy of this Commission allowing investor-owned utilities to do so.  
10      Because of the Commission’s prior decisions to allow the cost of plant that is in  
11      the process of being constructed to be included in the Company’s rate base, our  
12      South Carolina retail customers have reduced the cost of plant in rate base by  
13      avoiding capitalizing financing costs during construction.

14   **Q.   PLEASE ADDRESS THE ARGUMENT MADE BY WITNESS CHRISS**  
15       **THAT THE COMPANY’S REQUEST FOR AN INCREASE IN**  
16       **OPERATING INCOME IS EXCESSIVE.**

17   A.   Witness Chriss mischaracterizes our proposed rate increase request as an  
18       excessive increase in operating income. The increase in rates we have requested  
19       is driven by the substantial investment the Company has made to replace and  
20       upgrade existing infrastructure and to ensure that we can continue to meet our  
21       customers’ needs for reliable energy in the future. Our Application, direct and  
22       rebuttal testimony filings have explained in detail why the increase in rates is  
23       justified and we continue to believe the proposed rates should be approved.

1 Moreover, Mr. Chriss incorrectly quantifies the increase in operating income. If  
2 one compares the operating income effectively approved in the Company's last  
3 rate case to this case, it's a 14 percent increase—not 35 percent as Mr. Chriss  
4 alleges.

5 **Q. THE SC SMALL BUSINESS CHAMBER OF COMMERCE WITNESS**  
6 **KNAPP ALLEGES ON PAGE 3 OF HIS TESTIMONY THAT THE**  
7 **COMPANY "VOLUNTARILY REMOVED \$2,060,000 IN RETAIL**  
8 **REVENUE FROM THEIR FILING" AND THAT "THERE MIGHT BE**  
9 **MORE NON-ALLOWABLE EXPENSES THAT WOULD BE FOUND..."**  
10 **WHAT CONCERNS DO YOU HAVE WITH WITNESS KNAPP'S**  
11 **ALLEGATIONS?**

12 **A.** The Company follows the Federal Energy Regulatory Commission's Uniform  
13 System of Accounts ("USofA"). The USofA specifies the accounting for the  
14 different type of operating expenses that are recorded in accounts used to  
15 determine electric operating income for cost of service purposes including this  
16 rate case proceeding. These accounts are typically referred to as "above-the-line"  
17 accounts. Even though this Commission has adopted the USofA for accounting  
18 by utilities doing business in the State of South Carolina, this Commission has  
19 decided in past rate case proceedings to rule on a case by case basis to disallow  
20 some of the operating expenses that are properly charged to above-the-line  
21 accounts. Recognizing there will always be some amount of minor errors or  
22 charges that parties disagree on, the Company voluntarily reduced its revenue

1 requirement by approximately \$2 million to eliminate the need to argue about  
2 such items.

3 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

4 **A. Yes.**

**BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2013-59-E**

In the Matter of:	)	
	)	
Application of Duke Energy Carolinas,	)	<b>CERTIFICATE OF SERVICE</b>
LLC for Authority to Adjust and Increase	)	
Its Electric Rates and Charges	)	
	)	
	)	

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This is to certify that I have caused to be served this the 9<sup>th</sup> day of July, 2013, one copy of  
**Duke Energy Carolinas, LLC's Stipulation Supporting and Rebuttal Testimony of Robert B.  
Hevert and Clark S. Gillespy, and the Rebuttal Testimony of Carol Shrum and Jeffrey R.  
Bailey, via email to the parties set forth below:**

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A handwritten signature in black ink, reading "Timika Shafeek-Horton". The signature is fluid and cursive, with the first name "Timika" being more prominent and the last name "Shafeek-Horton" following in a similar style. The signature is written over a horizontal line.

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